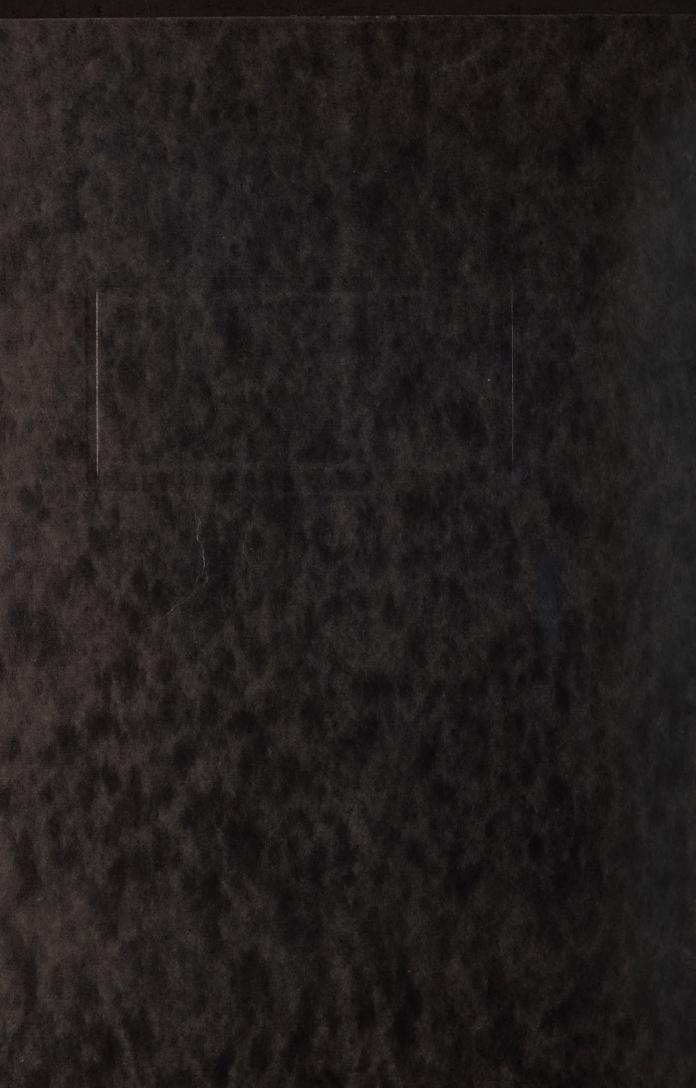
YAESU FTG200



# FT-6200

# Technical Supplement





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#### About This Manual



The information in this manual is intended to supplement the FT-6200 Operating Manual, for servicing the transceiver. Specifications and details of operation and options are provided in the operating manual, and are not reprinted herein. Therefore, this manual is not intended to serve as an independent reference, but to be used in conjunction with the information provided in the operating manual. The FT-6200 is intended to be serviced only by qualified technicians.

Two pcb layout diagrams are provided for each double-sided circuit board in the transceiver. Each side of the board is referred to by the type of the majority of components installed on that side ("leaded" or "chip-only"). In most cases one side has only chip components, and the other has either a mixture of both chip and leaded components (trimmers,

coils, electrolytic capacitors, ICs, etc.), or leaded components only.

While we believe the technical information in this manual is correct, Yaesu cannot assume any liability for damage that may occur as a result of typographical or other errors that may be present. Your cooperation in pointing out any inconsistencies in the technical information would be appreciated.

The technical information in this manual supercedes all previously published information on this product. Where information is duplicated in this manual and the operating manual, this manual should generally be considered more current.

Yaesu Musen reserves the right to make changes in the circuitry of this transceiver, in the interest of technological improvement, without obligation to owners.

# Case Disassembly & PCB Access

☐ Turn off the transceiver, and disconnect all cables.

#### Main Unit Solder Side Access

☐ Referring to Figure 1, remove the six screws from the top cover to expose the solder side of the Main Unit.

#### Other Units

☐ Referring to Figure 2, remove the six screws in the bottom cover. When removing the bottom cover, use care not to strain the wires to the loudspeaker.

#### PCB Locations are indicated in Figure 3.

☐ To access the Interface Unit, remove the three screws in the subpanel indicated in Figure 4.

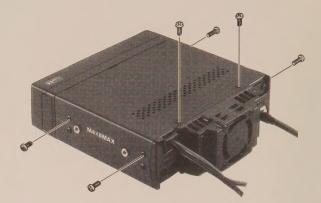


Figure 1.

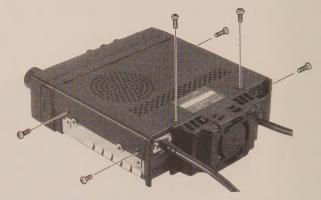


Figure 2.

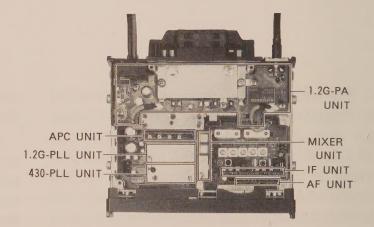


Figure 3.

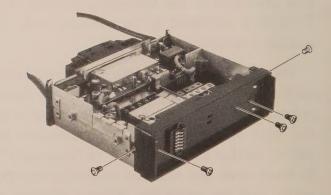
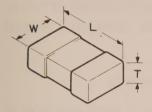


Figure 4.

# Chip Component Information

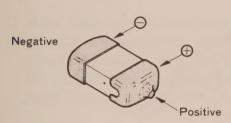
The diagrams below indicate some of the distinguishing features of common chip components.

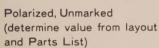
### Ceramic Capacitors

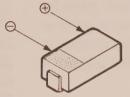


			(Unit: mm)
Туре	L	W	Т
3216	3.2	1.6	0.45~0.60
2125	2.0	1.25	0.35~0.50
1608	1.6	0.8	0.65~0.95

## Tantalum Capacitors



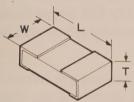




Examples:  $J475 = 6.3V 4.7\mu F$ 

G	4.0V	D	20V
J	6.3V	E	25V
Α	10V	٧	35V
С	16V		

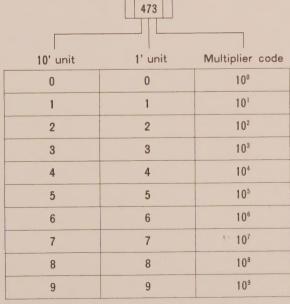
#### Resistors



(Unit: mm							
	Туре	L	W	Т			
	1/10	2.0	1.25	0.45			
	1/16	1.6	0.8	0.45			

INDICATED LETTERS

Type RMC 1/10W, 1/16W Marking\* 100, 222, 473.....



Examples:

 $100 = 10\Omega$ 

 $222 = 2.2k\Omega$ 

 $473 = 47k\Omega$ 

#### Replacing Chip Components

Chip components are installed at the factory by a series of robots. The first one places a spot of adhesive resin at the location where each part is to be installed, and later robots handle and place parts using vacuum suction.

For single-sided boards, solder paste is applied and the board is then baked to harden the resin and flow the solder. For double-sided boards, no solder paste is applied, but the board is baked (or exposed to ultra-violet) to cure the resin before dip soldering.

In our laboratories and service shops, small quantities of chip components are mounted manually by applying a spot of resin, placing with tweezers, and then soldering by very small dual streams of hot air (without physical contact during soldering). We remove parts by first removing solder using a vacuum suction iron, which applies a light, steady vacuum at the iron tip, and then breaking the adhesive with tweezers.

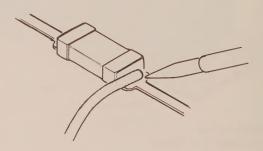
The special vacuum soldering/desoldering equipment is recommended if you expect to do a lot of chip replacements. Otherwise, it is usually possible to remove and replace chip components with only a tapered, temperature-controlled soldering iron, a set of tweezers and braided copper solder wick. Soldering iron temperature should be below 280 °C (536 °F).

#### Precautions for Chip Replacement

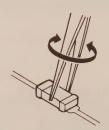
- ➤ Do not disconnect a chip forcefully, or the foil pattern may peel off the board.
- Never re-use a chip component. Dispose of all removed chip components immediately to avoid mixing with new parts.
- X Limit soldering time to 3 seconds or less to avoid damaging the component and board.

#### Removing Chip Components

☐ Remove the solder at each joint, one joint at a time, using solder wick whetted with non-acidic flux as shown below. Avoid applying pressure, and do not attempt to remove the tinning from the chip's electrode.



☐ Grasp the chip on both sides with tweezers, and gently twist the tweezers back and forth (to break the adhesive bond) while alternately heating each electrode. Be careful to avoid peeling the foil traces from the board. Dispose of the chip when removed.



☐ After removing the chip, use the copper braid and soldering iron to which away any excess solder and smooth the land for installation of the replacement part.

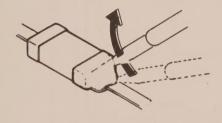
#### Installing a Replacement Chip

As the value of some chip components is not indicated on the body of the chip, be careful to get the right part for replacement.

☐ Apply a small amount of solder to the land on one side where the chip is to be installed. Avoid too much solder, which may cause bridging (shorting to other parts).

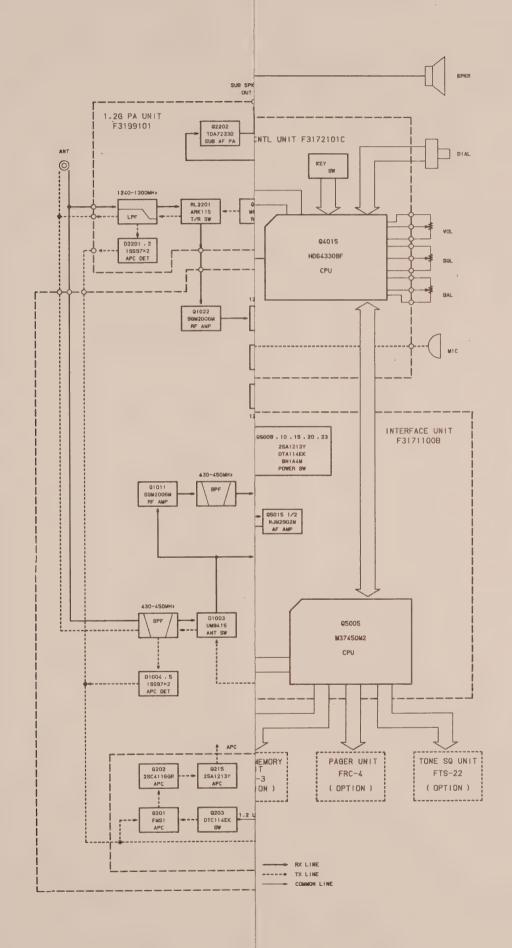


☐ Hold the chip with tweezers in the desired position, and apply the soldering iron with a motion line that indicated by the arrow in the diagram below. Do not apply heat for more than 3 seconds.

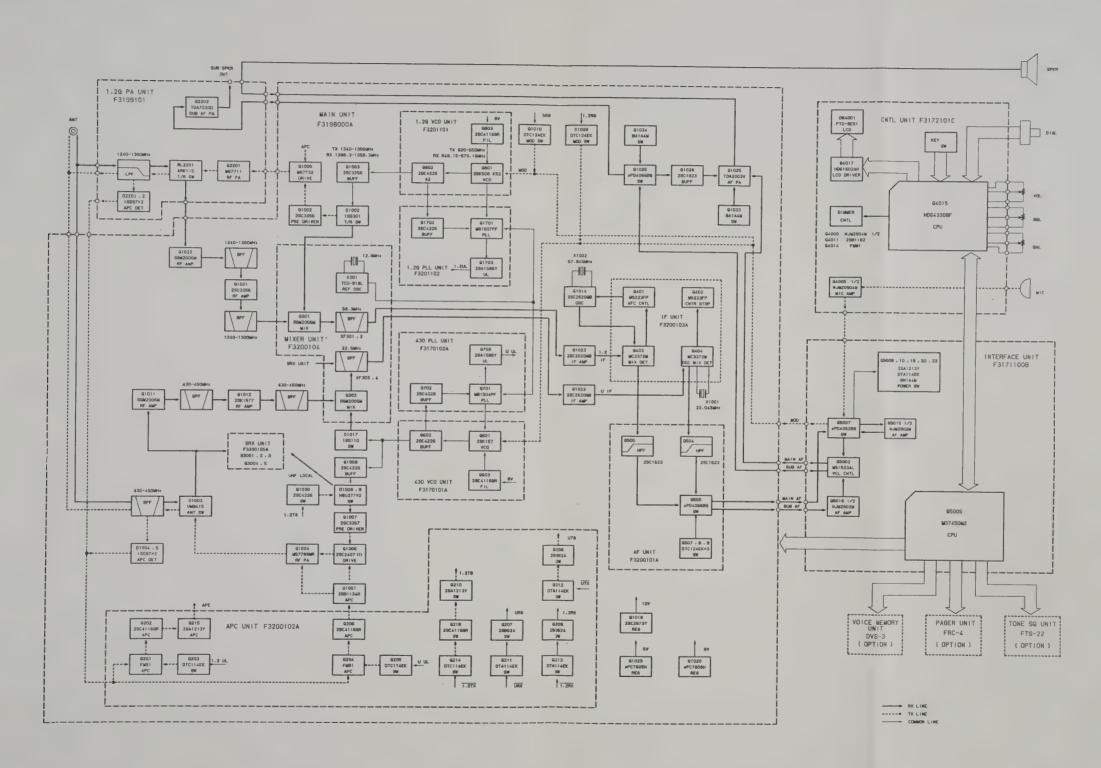


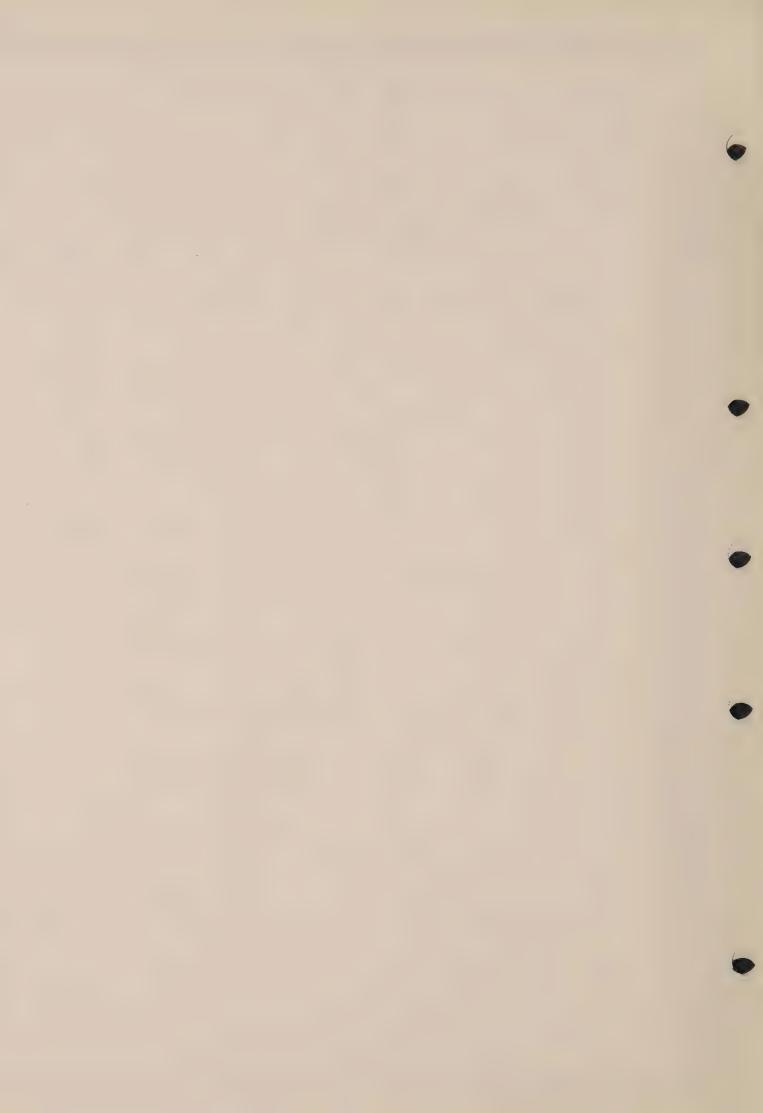
☐ Remove the tweezers and solder the electrode on the other side in the manner just described.

# Notes



# Notes





# Servicing

## Alignment

The FT-6200 is carefully aligned at the factory for the specified performance across the amateur bands. Realignment should therefore not be necessary except in the event of a component failure. All component replacement and service should be performed only by an authorized Yaesu representative, or the warranty policy may be voided.

The following procedures cover the sometimes critical and tedious adjustments that are not normally required once the transceiver has left the factory. However, if damage occurs and some parts subsequently be replaced, realignment may be required. If a sudden problem occurs during normal operation, it is likely due to component failure; realignment should not be done until after the faulty component has been replaced.

We recommend that servicing be performed only by authorized Yaesu service technicians who are experienced with the circuitry and fully equipped for repair and alignment. Therefore, if a fault is suspected, contact the dealer from whom the transceiver was purchased for instructions regarding repair. Authorized Yaesu service technicians realign all circuits and make complete performance checks to ensure compliance with specifications after replacing any faulty components.

Those who do undertake any of the following alignments are cautioned to proceed at their own risk. Problems caused by unauthorized attempts at realignment are not covered by the warranty policy. Also, Yaesu must reserve the right to change circuits and alignment procedures in the interest of improved performance, without notifying owners.

Under no circumstances should any alignment be attempted unless the normal function and operation of the transceiver are clearly understood, the cause of the malfunction has been clearly pinpointed and any faulty components replaced, and the need for realignment determined to be absolutely necessary.

The following test equipment (and thorough familiarity with its correct use) is necessary for complete realignment. Correction of

problems caused by misalignment resulting from use of improper test equipment is not covered under the warranty policy. While most steps do not require all of the equipment listed, the interactions of some adjustments may require that more complex adjustments be performed afterwards. Do not attempt to perform only a single step unless it is clearly isolated electrically from all other steps. Rather, have all test equipment ready before beginning, and follow all of the steps in a section in the order presented.

#### Required Test Equipment

- ☐ RF Signal Generator with calibrated output level at 1300 MHz
- Deviation Meter (linear detector)
- ☐ Oscilloscope
- ☐ AF Millivoltmeter
- SINAD Meter
- ☐ Inline Wattmeter with 5% accuracy at 1300 MHz
- Regulated DC Power Supply adjustable from 10 to 17 V, 20 A
- **I** 50-Ω Dummy Load: 50 W at 1300 MHz
- Frequency Counter: 100-Hz resolution and ± 0.2-ppm accuracy at 1300 MHz
- ☐ AF Signal Generator
- DC Voltmeter: high impedance
- ☐ Spectrum Analyzer
- ☐ UHF Sampling Coupler

### Alignment Preparation & Precautions

A 50- $\Omega$  dummy load and inline wattmeter must be connected to the antenna jack in all procedures that call for transmission, except where specified otherwise. Correct alignment is not possible with an antenna.

After completing one step, read the following step to determine whether the same test equipment will be required. If not, remove the test equipment (except power supply, dummy load and wattmeter, if connected) before proceeding.

Correct alignment requires that the ambient temperature be the same as that of the trans-

ceiver and test equipment, and that this temperature be held constant between 20 and 30 °C (68 ~ 86 °F). When the transceiver is brought into the shop from hot or cold air it should be allowed some time for equalization with the environment before alignment.

Alignments must only be made with oscillator shields and circuit boards firmly affixed in place. Also, the test equipment must be thoroughly warmed up before beginning.

Most alignment procedures call for tuning the transceiver to the high or low band edge, or to band center. The actual frequency differs between different versions, so the technician should make sure of the band limits of each set to be aligned before beginning.

Note: Signal levels in dB referred to in the alignment procedure are based on 0 dB $\mu$  = 0.5 dB $\mu$ V.

#### PLL VCV

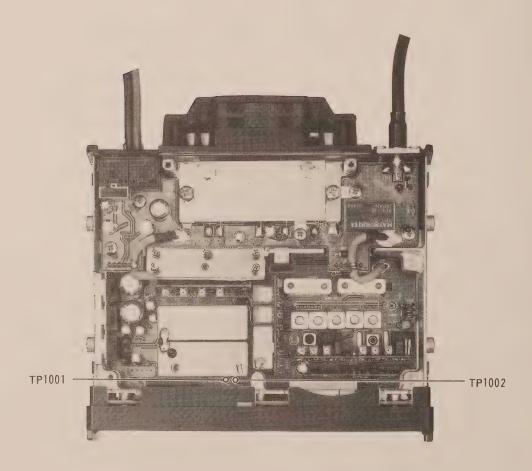
Set up the test equipment as shown here for transmitter alignment. Maintain the supply voltage at 13.6 V for all steps.

UHF PLL VCV (Varactor Control Voltage) Check

- ☐ Connect the positive lead of the DC voltmeter to test point TP1002 on the Main Unit, as indicated below, and the negative lead to chassis ground.
- ☐ Set the transceiver to 430.000 MHz (432.000 MHz in version D), and confirm 1.5 ~ 4.5 V on the voltmeter while receiving.
- $\square$  Key the transmitter and confirm 2.5 ~ 5.5 V on the voltmeter.

#### 1.3-GHz PLL VCV Check

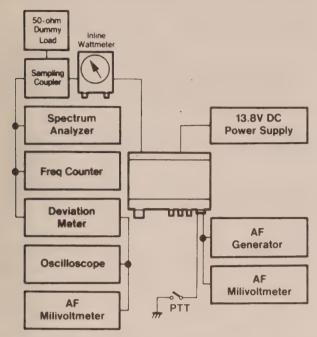
- Connect the DC voltmeter to TP1002 on the Main Unit.
- ☐ Tune to 1240.000 MHz and confirm the VCV is between 3 and 5 V while receiving, and between 1 and 3 V while transmitting.



PLL Unit Alignment Points

#### 70-Centimeter Transmitter

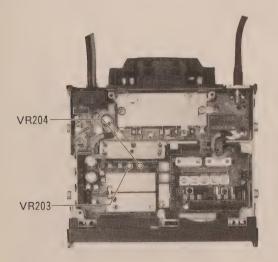
For all of these procedures, connect the test equipment as shown in the diagram below.

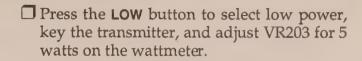


70-cm Transmitter Alignment Setup

#### 70-cm Power Output

- ☐ Tune to the center of the band (for the version being aligned), and press the **LOW** button, if necessary, to select high power output.
  - ☐ Key the transmitter and adjust VR204 on the APC Unit for 35 watts on the wattmeter (use care not to exceed 42 watts during the alignment).





#### 70-cm Transmitter Deviation

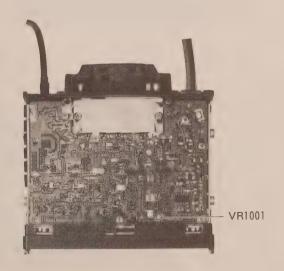
- ☐ While tuned to the center of the band, adjust the AF generator attenuator for 50-mV output at 1 kHz to the MIC jack.
- $\square$  Key the transmitter and adjust VR1001 on the Main Unit for  $\pm 4.5$ -kHz deviation on the deviation meter (within 100 Hz).
- $\square$  Reduce the AF injection until the deviation meter shows  $\pm$  3.5-kHz deviation, and confirm that the injection level is 4 to 6 mV.

#### 23-Centimeter Transmitter

For all of these procedures, connect the test equipment per the top of the next page.

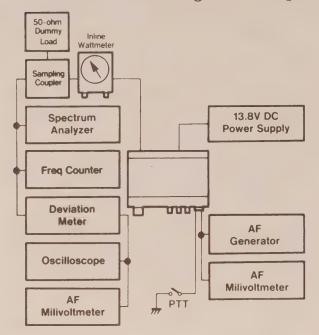
#### 23-Centimeter Power Output

- ☐ Tune to band center (for the version being aligned), and press the **LOW** button, if necessary, to select high power output.
- ☐ Key the transmitter and adjust VR202 on the APC Unit for 10 watts on the wattmeter (use care not to exceed 12 watts during the alignment).
- ☐ Press the **LOW** button to select low power, key the transmitter, and adjust VR201 for 1 watt on the wattmeter.



70-Centimeter Transmitter Alignment Points

#### 23-cm Transmitter Alignment Setup

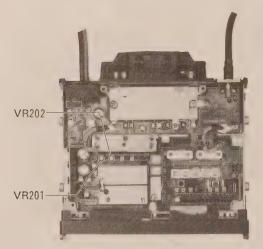


#### Reference Oscillator Check

Connect the frequency counter to pin 20 of the Mixer Unit (accessible on the solder side of the Main Unit) and confirm 12.8 MHz  $\pm$  5 Hz.

#### 23-Centimeter Transmitter Deviation

- While tuned to the center of the band, adjust the AF generator attenuator for 50-mV output at 1 kHz to the MIC jack.
- $\square$  Key the transmitter and adjust VR1002 on the Main Unit for  $\pm 4.5$ -kHz deviation on the deviation meter (within 100 Hz).
- $\square$  Reduce the AF injection until the deviation meter shows  $\pm$  3.5-kHz deviation, and confirm that the injection level is 4 to 6 mV.



#### Receiver

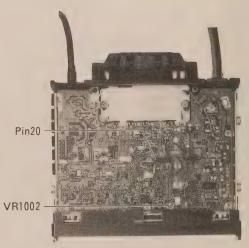
Set up the test equipment as shown at the bottom of the next page for receiver alignment.

#### Interstage Transformers

- ☐ Tune the transceiver and RF signal generator to the center of the 70-cm band. Modulate the RF signal generator with ± 3.5-kHz deviation of a 1-kHz tone.
- ☐ Adjust TC1001 on the Main Unit for optimum 12-dB SINAD (less than –10 dBµ).
- □ Confirm –8 dBµ or better 12-dB SINAD at the center and bottom edge of the 70-cm band.
- ☐ Tune the transceiver and RF signal generator to the *center* of the 23-cm band and repeat the same procedure with the AFC on, adjusting T1002 and L1016 on the Main Unit for optimum SINAD.
- ☐ Connect the DC voltmeter to pin 9 of Q403 on the IF Unit, and note the DC voltage.
- ☐ Turn the AFC off and adjust VR406 on the IF Unit for the same voltage noted in the last step.
- $\square$  Confirm 10 dB $\mu$  or better 12-dB SINAD at the center of the band, and 9 dB $\mu$  or better at the band edges.

#### S-Meter Calibration

□ While tuned to the center of the 70-cm band, inject 25-dBµ RF modulated with ± 3.5-kHz deviation of a 1-kHz tone. Adjust VR405 on the IF Unit so that all S-meter segments are just on.



23-cm Transmitter & 12.8 MHz Ref. Osc. Alignment Points

☐ Tune the transceiver and RF signal generator to the center of the 23-cm band and with the same injection level and modulation, adjust VR404 so that all S-meter segments are just on.

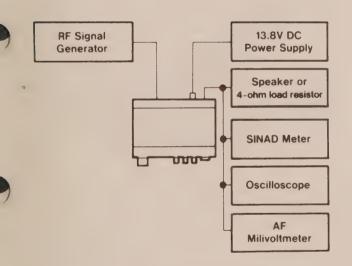
#### Scanner Center-Stop

- ☐ With both the transceiver and signal generator tuned to the center of the 70-cm band, set the signal generator for nil injection, then set the SQL control so that the squelch is just closed.
- ☐ Connect the DC voltmeter (3-V range) between TP3 (+) and TP4 (-) on the IF Unit,

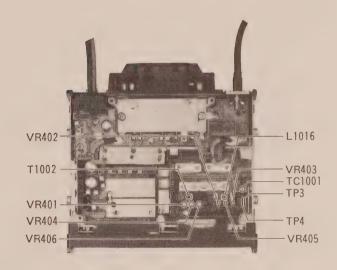
- and with no signal at the antenna jack, adjust VR402 for zero volts on the meter.
- Inject 30-dBμ RF modulated with  $\pm$  3.5-kHz deviation of a 1-kHz tone, then press the UP button on the microphone for more than  $\frac{1}{2}$  second to start scanning. Confirm that scanning stops at the injection frequency.

#### Squelch Preset

- ☐ Set the **SQL** control to the 9-o'clock position.
- ☐ With no signal at the antenna jack, set VR-403 on the IF Unit so that the squelch is just closed on the 70-cm band, and set VR401 so the squelch is just closed on the 23-cm band.



**Receiver Alignment Setup** 



**Receiver Test Points** 

## Pilot Lamp Replacement

- ☐ Remove the control head from the chassis, if connected, by lifting the catch on the left side of the head and unhooking the right side.
- ☐ Pull the knobs off the panel, and unscrew the ring nuts affixing the mic jack and the tuning shaft (you may be able to do this with long-nose pliers, or have your dealer do it with a special wrench).
- ☐ Remove the front panel cover (it clips at the top and bottom edges) and two white plastic shields, and with a jeweler's screwdriver, remove the tiny screw on the circuit board just left of the mic jack.
- ☐ Remove the two screws from the back side of the control head, and carefully separate the back cover from the circuit board, noting the positions of the brackets on either side as you do so.
- ☐ Referring to Figures 1 and 2, unsolder the old bulbs and install the replacements.

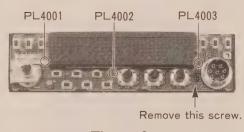


Figure 3.

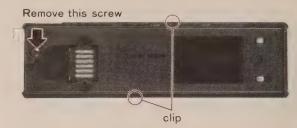


Figure 1.



Remove this screw

Figure 2.

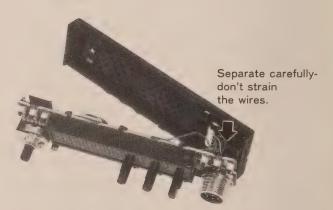


Figure 4.

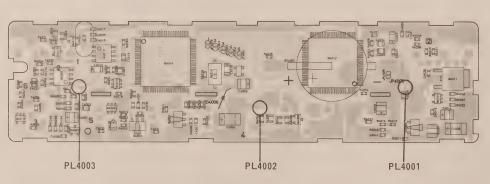
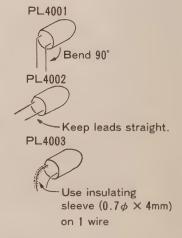


Figure 5.



## **Installation of Options**

This chapter describes the installation procedures for the DVS-3 Digital Voice Recorder/DTMF Pager, FRC-4 DTMF Pager, FTS-22 Tone Squelch Unit and the YSK-1/1L Trunk Mounting Kits. These options are available from your Yaesu dealer. If installing both the FTS-22 and either the FRC-4 or DVS-3, install the FTS-22 last.

*Note!* The FRC-4 and DVS-3 cannot be installed together. The DVS-3 includes all functions of the FRC-4.

#### FRC-4 DTMF Pager or DVS-3 Digital Voice Recorder/DTMF Pager Installation

The FRC-4 provides DTMF paging/selcall features using 3-digit DTMF station ID codes. Six code memories store your ID code plus those of five frequently-called stations. Control is provided through the front panel of the transceiver. The DVS-3 includes all features of the FRC-4, plus recording and playback of received signals and messages for transmission. See the *FT-6200 Operating Manual* for operational details.

The FRC-4 and DVS-3 install in the same location, and cannot both be installed together. If also installing the FTS-22 Tone Squelch Unit, save it until after the FRC-4 or DVS-3 is installed.

- Disconnect the DC power cable, and set the transceiver upside-down. Referring to Figure 1 on the next page, remove the six screws affixing the bottom cover, and remove the cover.
- Lift the speaker out of its bracket, and set the bracket and speaker aside for now. Referring to Figure 2, note the accessory mounting location. If the FTS-22 is already installed, you will need to remove it temporarily: just lift the FTS-22 board gently, allowing the double-sided tape underneath to come unstuck. Keep the tape with the FTS-22 board, and fold it aside for the moment (you need not disconnect it).
- ☐ If the FRC-4 is installed and you are installing a DVS-3 (or vice-versa), remove the screw holding the installed board, and unplug its three cables.

- ☐ Refer to Figure 3 for the location of the three connectors used by the FRC-4 and DVS-3 (just in front of the loudspeaker's position). Connect the cables from the FRC-4 or DVS-3 to these connectors carefully, so as not to install the plugs upside down.
- ☐ Position the FRC-4 or DVS-3 as shown in Figure 4, and use the supplied screw to fix it in place.
- ☐ If the FTS-22 was already installed, reuse the double-sided tape to stick it on top of the newly installed board, in the same way it was before (that is, with the cable running over the top of the FTS-22).
- ☐ If installing an FTS-22 in this transceiver for the first time, proceed to the FTS-22 procedure below. Otherwise, replace the loudspeaker and its bracket, the top cover, and its six screws.

#### FTS-22 Tone Squelch Unit Installation

The FTS-22 includes an encoder and decoder for 38 EIA standard subaudible CTCSS tones, programmable from the front panel of the FT-6200. It provides silent monitoring of busy channels when activated by the ENCode/DECode Tone Squelch function. Tone squelch operation on both bands requires only one FTS-22, and it may be installed after installing either the DVS-3 or FRC-4. See the FT-6200 Operating Manual for operational details.

- Disconnect the power cable, and turn the set upside-down. Referring to Figure 1 on the next page, remove the six screws affixing the bottom cover, and remove the cover.
- Referring to Figure 5, locate unused 12-pin connector J5005 inside the front panel.
- ☐ Peel the covering from one side of the double-sided tape provided with the FTS-22. If the FRC-4 or DVS-3 is installed in front of J5005, stick the tape on top of that board. Otherwise, stick it on the top of the VCO housing just behind J5005.
- ☐ Note in Figure 6 how the FTS-22 cable routes over the top of the board. Plug the FTS-22 cable into J5005. Then peel the covering from the exposed side of the tape, and press the FTS-22 onto it.

- ☐ The factory adjusts the output tone level (VR1 on the FTS-22) for the proper deviation, so it should require no further adjustment.
- ☐ Replace the bottom cover removed in the first step.

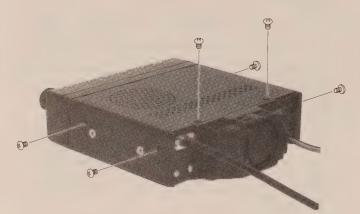


Figure 1.

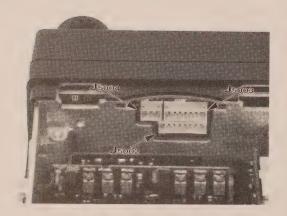


Figure 3.



Figure 5.

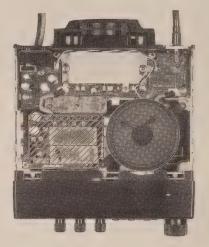


Figure 2.

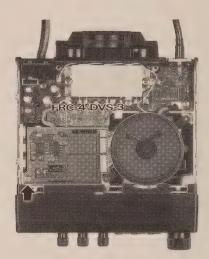


Figure 4.

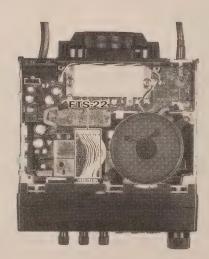


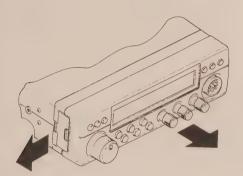
Figure 6.

#### YSK-1/1L Trunk Mounting Kit Installation

The YSK-1/1L kits consist of a 3-m (YSK-1) or 6-m (YSK-1L) interconnecting cable for the Controller, and Controller mounting hardware. This allows the main body of the transceiver to be installed under a seat, in the trunk, or anywhere else out of the way, while the Controller is mounted on the dashboard. A choice of Controller mounting methods allows it to be easily removed and taken with you when leaving the vehicle.

#### To install the YSK-1/1L:

☐ Disconnect the DC power cable, and carefully lift the latch on the left side of the Front Panel/Controller while pulling the panel forward.



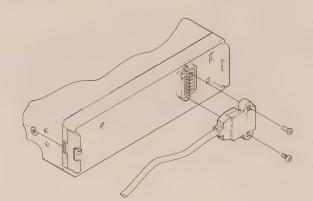
#### Caution!

Do not install the main body of the transceiver near a heating vent, nor in a tightly closed compartment – the heatsink need ventilation!

- □ Use two of the supplied 12-mm (½-inch) machine screws to connect the mating end of the extension cable (the end with flat contacts) over the contacts on the front of the transceiver body, so that the cable exits the connector toward the center of the transceiver body.
- ☐ Mount the main body of the transceiver in the trunk or other out-of-the-way location using the MMB-37 Mounting Bracket supplied with the transceiver, as described on pages 7 and 8. Remember: DC power must be supplied to the main body, and at least one external speaker (page 9) should be connected.
- ☐ Route the external speaker cable and Controller interconnecting cable to the desired locations.
- Referring to the diagram on the next page, decide where to install the Front Panel/Controller, and which parts of the Controller mounting hardware you will need. The Controller Nest may be screwed directly to a flat surface, or installed with the hinged angle bracket. If you will not

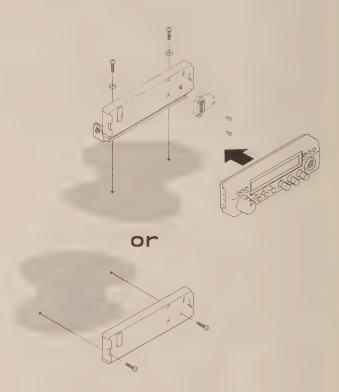
need the hinged bracket, remove the two short machine screws affixing it to the Nest.

- Do not mount the Controller Unit where it will be exposed to direct sunlight for long periods, nor where temperatures might exceed 60 °C (140 °F).
- ☐ Use the two supplied self-tapping screws and flat washers to mount the Nest (with or without the metal bracket) to the car.



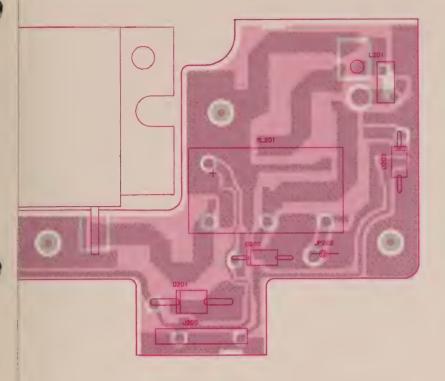
- ☐ Using the two supplied 7-mm (1/4-inch) machine screws, mount the free end of the cable inside the Controller Nest so that the contacts face outward.
- ☐ Clip the Front Panel/Controller into the Nest, right side first.

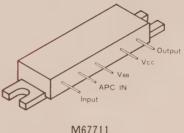
Note: In cold climates the display on the Controller Unit may fail to operate in temperatures below -20 °C (-4 °F).



REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV	TOL.	VERS.
		*** 1.2G PA UNIT *	**				AND APP MINE SIZE THE SPICE
	CA0238001	P.C.B. W COMP.					
	F3199101	P.C.B. W/O COMP.					
C 2227 C 2228 C 2229 C 2230 C 2231 C 2232 C 2233 C 2234 C 2235 C 2236 C 2237 C 2238  D 2201 D 2202 D 2203  J 2201 J 2202 J 2203	K22140811 K40129066 K46120010 K46120008 K46120007 K22170805 K22170202 K22170202 K22170201 K22170201 K22170201 K22170203 K22170217 K22170203 K22170217 K22170203 K22170235 K46120004 K22170235 K46120004 K22170203 K22170201 K22170203 K22170201 K22170203 K22170201 K22170203 K22170201 K22170201 K22170203 K22170201 K22170203 K22170201 K22170203 K22170201 K22170203 K22170201 K22170203	CHIP CAP. AL. ELECTRO. CAP. AL. ELECTRO. CAP. AL. ELECTRO. CAP. AL. ELECTRO. CAP. CHIP CAP.	RC2-16V470M-T34 RC2-16V220M-T34 16V101M6X7TR2 GRM40B102M50PT GRM40CH101J50PT GRM40CK010C50PT GRM40CK101J50PT GRM40CK010C50PT GRM40CK010C50PT GRM40CK020C50PT GRM40CK020C50PT GRM40CH101J50PT 16V100M4X7TR2 GRM40CH101J50PT GRM40CH101J50PT GRM40CH101J50PT GRM40CH101J50PT GRM40CH101J50PT GRM40CH101J50PT GRM40CH101J50PT GRM40CH101J50PT GRM40CH101J50PT GRM40CK020C50PT GRM40CK020C50PT GRM40CK020C50PT	22uF 100uF 0.001uF 100pF 1pF 100pF 18pF 0.5pF 1pF 2pF 18pF 100pF 10uF 100pF 0.001uF 18pF 100pF 10uF	50V 16V 50V 50V 50V 50V 50V 50V 50V 50V	B CH CK CK CK CH CH CH CH CK CK CK CK CK CK CK CCK C	

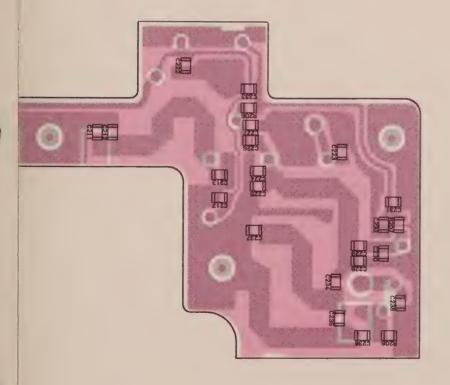
REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV TOL	vers.
L 2201	L0021359	COIL	1.5T3.5D0.6UEW R			
P 2201 P 2202	T9317877 T9317877	WIRE-ASSY WIRE-ASSY				
Q 2201 Q 2202	G1090803 G1091112	IC IC	M67711 TDA7233D-TR			
R 2201 R 2202 R 2203 R 2204 R 2205 R 2206 R 2207 R 2208	J24205479 J24275221 J24245229 J24205103 J24245229 J24205103 J24205103 J2420523	CHIP RES.	RMC1/4 2R2JATP RMC1/10T 103J RMC1/4 2R2JATP RMC1/10T 103J RMC1/10T 103J	220 2.2 10K 2.2 10K 10K	1/2W 1/4W 1/10W 1/4W 1/10W 1/10W	
RL2201 TP2201	M1190094 Q5000082	RELAY TP-N IPS-1091	ARK115 DC9V TP-N IPS-1091		DC9V	





M67711 (Q2201)

(obverse view of "component" side)

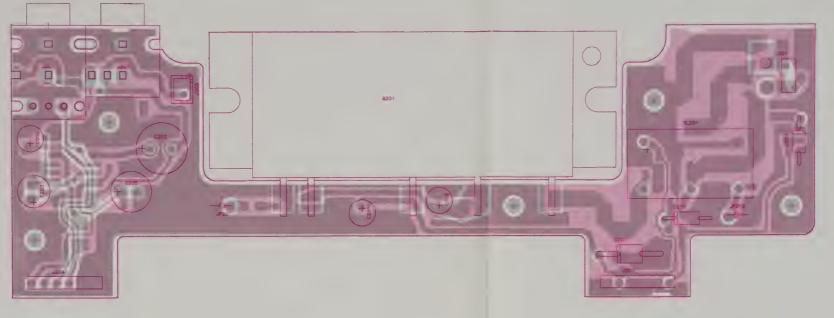


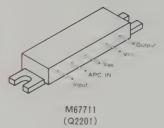
PIN4 PIN1 PIN8 TDA7233D (Q2202)

(obverse view of "chip-only" side)

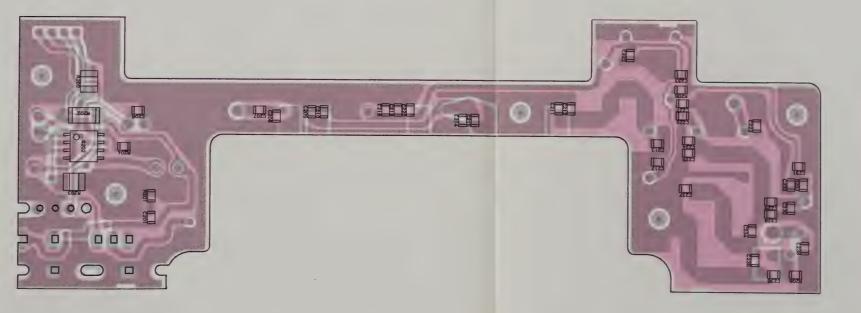
		A CONTRACTOR OF THE PARTY OF TH					
REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV 	TOL.	VERS.
L 2201	L0021359	COIL	1.5T3.5D0.6UEW R				
P 2201 P 2202	T9317877 T9317877	WIRE-ASSY WIRE-ASSY					
Q 2201 Q 2202		IC IC	M67711 TDA7233D-TR				
R 2201 R 2202 R 2203 R 2204 R 2205 R 2206 R 2207 R 2208	J24205479 J24275221 J24245229 J24205103 J24245229 J24205103 J24205103 J24205223	CHIP RES.	RMC1/2 221JCTP RMC1/4 2R2JATP RMC1/10T 103J RMC1/4 2R2JATP RMC1/10T 103J RMC1/10T 103J	220 2.2 10K 2.2 10K 10K	1/2W 1/4W 1/10W 1/4W 1/10W		
RL2201 TP2201	M1190094 Q5000082	RELAY TP-N IPS-1091	ARK115 DC9V TP-N IPS-1091		DC9V		

#### 1.2G-PA UNIT(No.22XX)



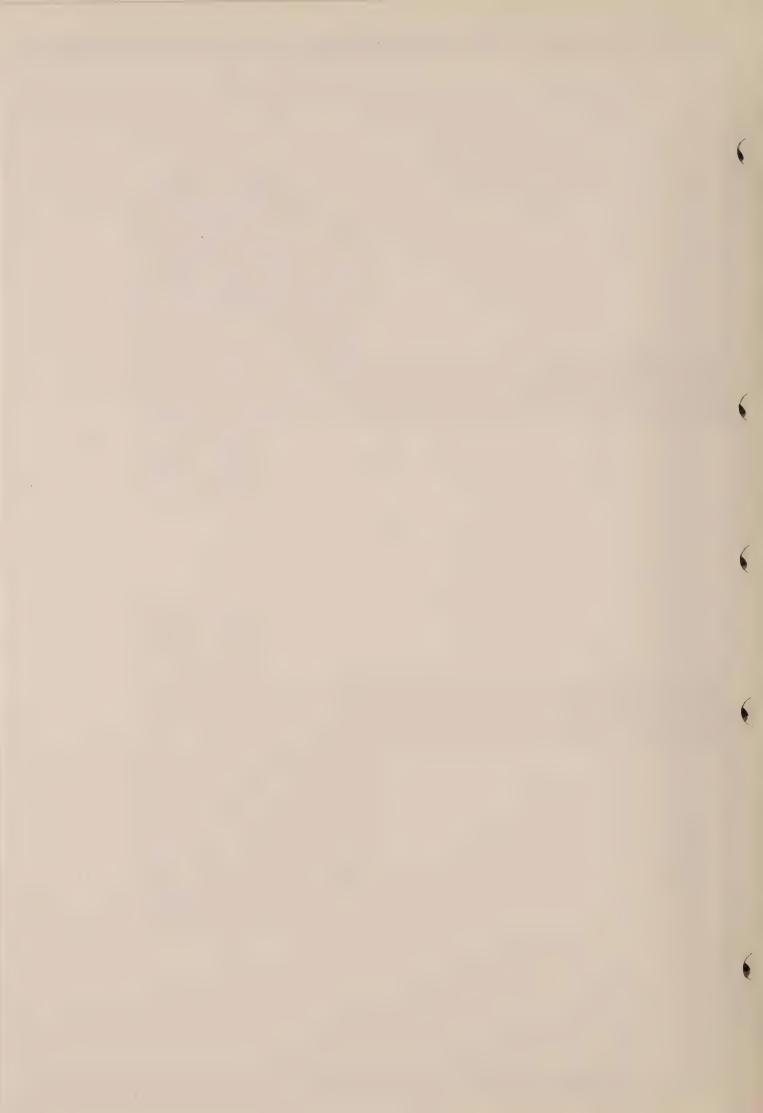


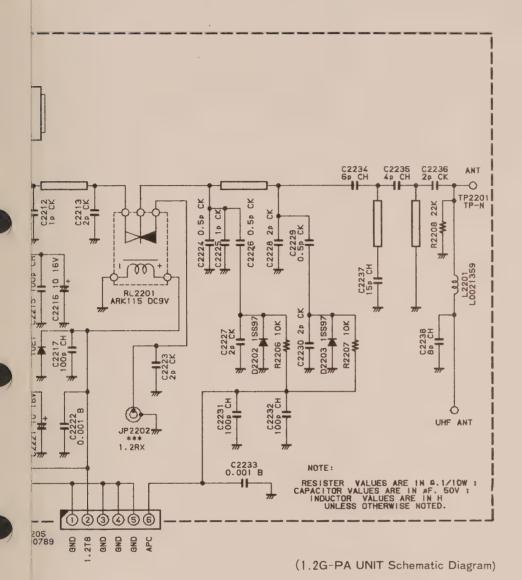
(obverse view of "component" side)

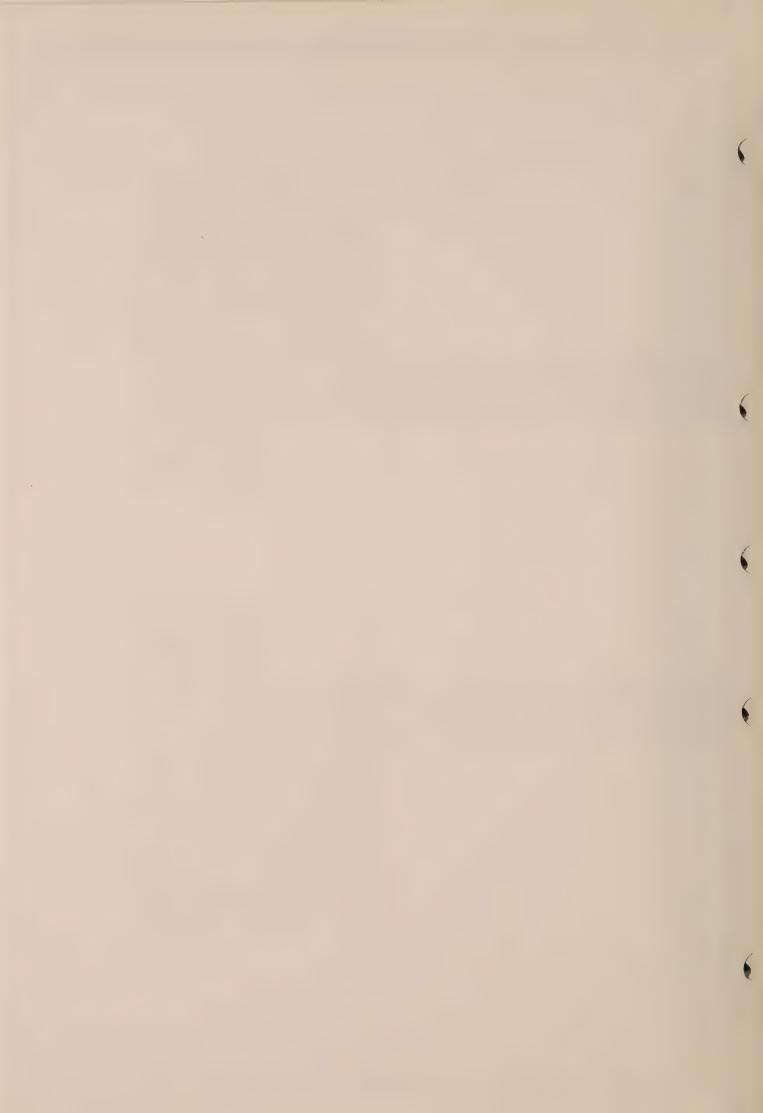


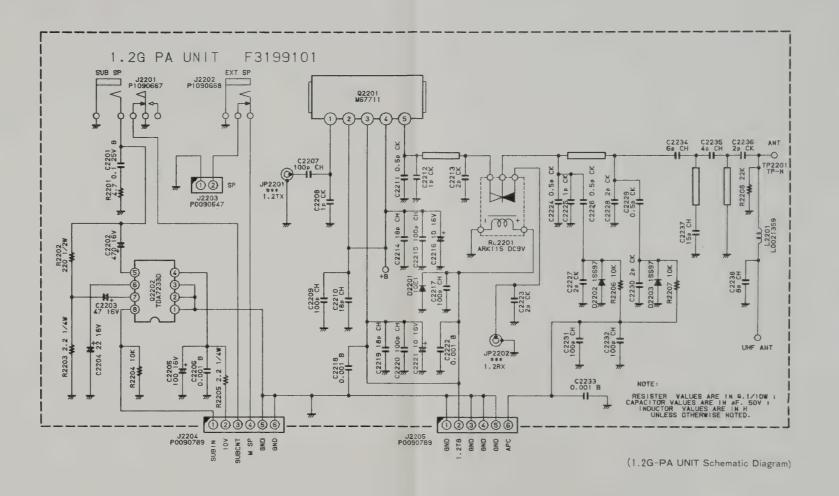


(obverse view of "chip-only" side)









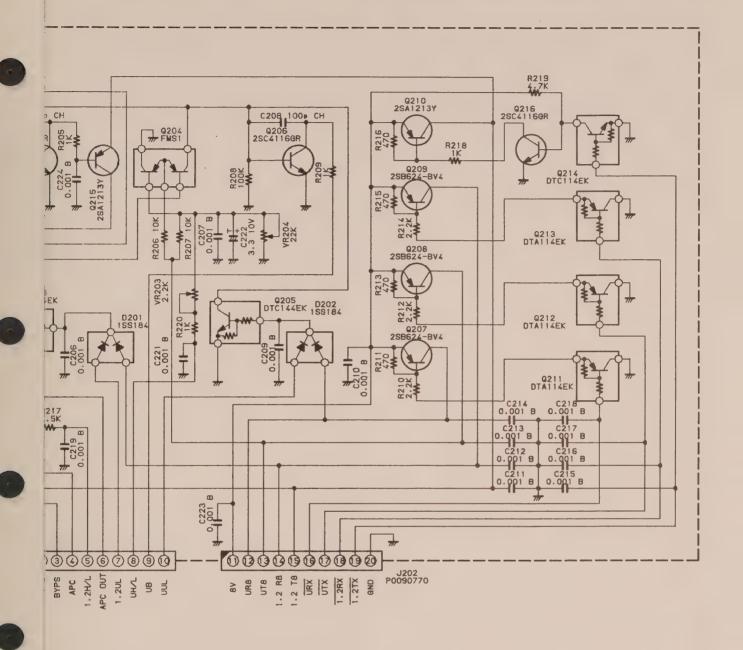


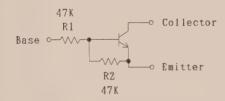
# APC Unit Parts List

REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV	TOL.	VERS.
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	CA0281001	P.C.B. W COMP.					
	F3200102A	P.C.B. W/O COMP.					
C 0201 C 0202 C 0203 C 0204 C 0205 C 0206 C 0207 C 0208 C 0209 C 0210 C 0211 C 0212 C 0213 C 0214 C 0215 C 0216 C 0217 C 0218 C 0219 C 0220 C 0222 C 0223 C 0223 C 0224	K22174809 K78100002 K22174809 K78100002	CHIP CAP. TANTALUM CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP.	GRM39B102M50PT GRM40R683M16PT GRM39B102M50PT F951A335MSAAF1Q2 GRM39B102M50PT F951A335MSAAF1Q2 GRM39B102M50PT GRM39B102M50PT GRM39B102M50PT	0.001uF 0.001uF 100pF 0.001uF 0.001uF 0.001uF 0.001uF 0.001uF 0.001uF 0.001uF 0.001uF 0.001uF 0.001uF 0.001uF 0.001uF 0.001uF 0.001uF 0.001uF 0.001uF 0.001uF	50V 16V 50V 50V 50V 50V 50V 50V 50V 50V 50V 50	B R B B CH B B B B B B B B B B B B B B B B	
D 0201 D 0202	G2070009 G2070009	DIODE DIODE	1SS184 TE85R 1SS184 TE85R				
J 0201 J 0202		CONNECTOR CONNECTOR	9230B-1-10Z005-T 9230B-1-10Z005-T				
Q 0201 Q 0202 Q 0203 Q 0204 Q 0205 Q 0206 Q 0207 Q 0208 Q 0209 Q 0210 Q 0211 Q 0211 Q 0213 Q 0214 Q 0215 Q 0216	G3341167G G3070033 G3070008 G3070033 G3341167G G3206247D G3206247D G3206247D G3112137Y G3070047 G3070047 G3070047 G3070002 G3112137Y	TRANSISTOR	FMS1 T98 2SC4116GR TE85R DTC144EK T97 FMS1 T98 DTC144EK T97 2SC4116GR TE85R 2SB624-T2B BV4 2SB624-T2B BV4 2SB624-T2B BV4 2SB624-T2B BV4 2SA1213Y TE12R DTA114EK T97 DTA114EK T97 DTA114EK T97 DTC114EK T96 2SA1213Y TE12R 2SC4116GR TE85R				
R 0201 R 0202 R 0203	J24185103	CHIP RES. CHIP RES. CHIP RES.	RMC1/16 103JATP RMC1/16 103JATP RMC1/16 223JATP	10K	1/16	3W	

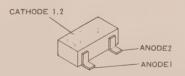
# APC Unit Parts List

REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE		VERS.
R 0204	J24185104	CHIP RES.	RMC1/16 104JATP	100K	1/16W	
R 0205	J24185102	CHIP RES.	RMC1/16 102JATP	1K	1/16W	
	J24185103	CHIP RES.	RMC1/16 103JATP	10K	1/16W	
R 0207			RMC1/16 103JATP			
R 0208	J24185104	CHIP RES.	RMC1/16 104JATP	100K	1/16W	
			RMC1/16 102JATP			
	J24185222	CHIP RES.	RMC1/16 222JATP	2. 2K	1/16W	
R 0211	J24185471	CHIP RES.	RMC1/16 471JATP	470	1/16W	
R 0212	J24185222	CHIP RES.	RMC1/16 222JATP	2.2K	1/16W	
R 0213	J24185471	CHIP RES.	RMC1/16 471JATP	470	1/16W	
R 0214	J24185222	CHIP RES.	RMC1/16 222JATP	2.2K	1/16W	
R 0215	J24185471	CHIP RES.	RMC1/16 471JATP	470	1/16W	
R 0216	J24185471	CHIP RES.	RMC1/16 471JATP	470	1/16W	
R 0217	J24185152	CHIP RES.	RMC1/16 152JATP	1.5K	1/16W	
R 0218			RMC1/16 102JATP			
R 0219			RMC1/16 472JATP			
R 0220			RMC1/16 102JATP			
VR0201	J50785222	POT.	RHO3AVAJ3XO1A	2. 2K		
VR0202			RHO3AVAJ4XO1A			
VR0203			RHO3AVAJ3X01A			
VR0204	J50785223		RHO3AVAJ4X01A			

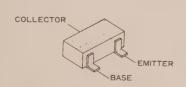




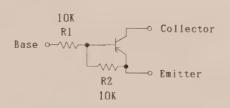
DTC 144EK CIRCUIT DIAGRAM



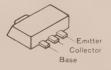
1SS184(B3) (D0201, D0202)



DTA114EK(14) (Q0211,Q0212,Q0213)



DTA114EK CIRCUIT DIAGRAM



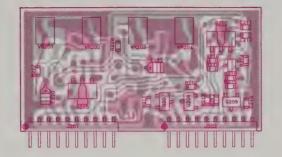
2SA1213Y(NO) (Q0210, Q0215)

# APC Unit Parts List

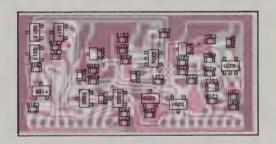
REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV TO	L. VERS.
R 0204	.124185104	CHIP RES	RMC1/16 104JATP	100K	1/16W	
R 0205	J24185102	CHIP RES.	RMC1/16 102JATP	1 K	1/16W	
R 0206	J24185103	CHIP RES.	RMC1/16 103JATP	10K	1/16W	
R 0207	J24185103	CHIP RES.	RMC1/16 103JATP	10K	1/16W	
R 0208	J24185104	CHIP RES.	RMC1/16 104JATP	100K	1/16W	
R 0209	J24185102	CHIP RES.	RMC1/16 102JATP	1K	1/16W	
			RMC1/16 222JATP			
			RMC1/16 471JATP			
R 0212			RMC1/16 222JATP			
			RMC1/16 471JATP			
			RMC1/16 222JATP			
			RMC1/16 471JATP			
			RMC1/16 471JATP			
			RMC1/16 152JATP			
			RMC1/16 102JATP			
			RMC1/16 472JATP			
R 0220	J24185102	CHIP RES.	RMC1/16 102JATP	1K	1/16W	
VR0201	J50785222	POT.	RHO3AVAJ3XO1A	2. 2K		
VR0202	J50785223		RHO3AVAJ4XO1A			
VR0203			RHO3AVAJ3XO1A			
VR0204	J50785223		RHO3AVAJ4X01A	22K		

APC UNIT F3200102A

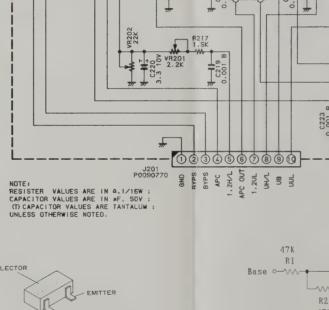
#### APC UNIT (No.02XX)

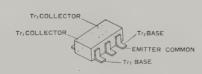


(obverse view of "component" side)

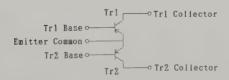


(obverse view of "chip-only" side)





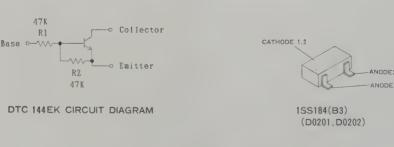
FMS1 (S1) (Q0201,Q0204)

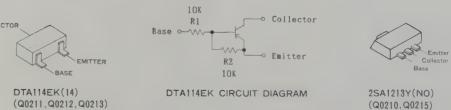


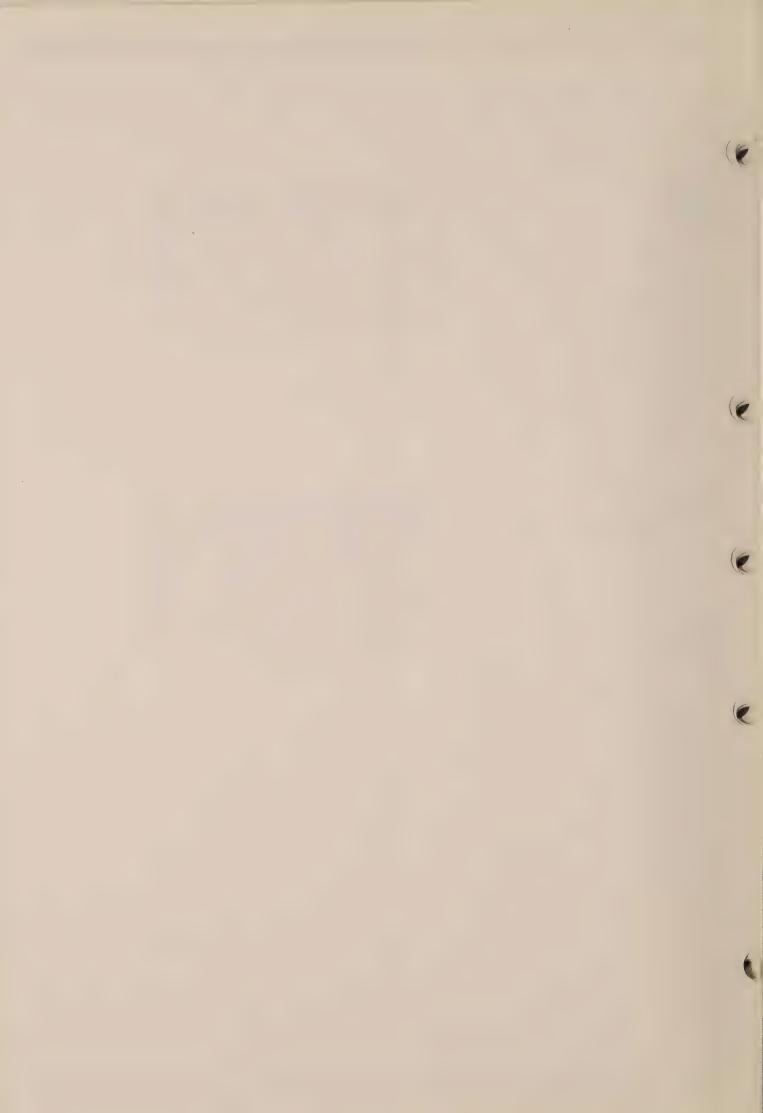
FMS1 CIRCUIT DIAGRAM



2SB624(BV4) (Q0207, Q0208, Q0209) 2SC4116GR(LG) (Q0202, Q0206, Q0216) DTC144EK(26) (Q0203, Q0205) DTC114EK(24) (Q0214)



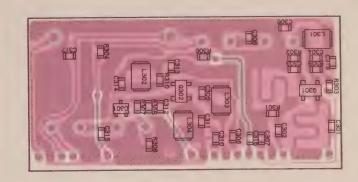




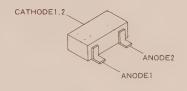
# Mixer Unit Parts List

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		*** MIXER UNIT ***					
	CA0261001	P.C.B. W COMP.					
	F3200104A	P.C.B. W/O COMP.					
C 0310 C 0312 C 0313 C 0314 C 0315 C 0316	K22174202 K22174235 K22144803 K22174215 K22144803 K22174213 K22144803 K22174205 K22174204 K22144802 K22144803 K22174229 K22174207 K22144803 K22174207 K22144803 K22174809	CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP.	GRM39CK010C50PT GRM39CH101J50PT GRM39B103K25PT GRM39CH150J50PT GRM39B103K25PT GRM39CH120J50PT GRM39CH040C50PT GRM39CH040C50PT GRM39CH040C50PT GRM39B103K25PT GRM39B103K25PT GRM39B103K25PT GRM39CH060D50PT GRM39B103K25PT GRM39B103K25PT GRM39B103K25PT GRM39B103K25PT GRM39B103K25PT	1pF 100pF 0.01uF 15pF 0.01uF 12pF 0.01uF 4pF 3pF 0.01uF 0.01uF 56pF 6pF 0.01uF 0.01uF	50V 50V 25V 50V 25V 50V 25V 50V 25V 50V 25V 25V 50V 25V	CK CH B CH B CH CJ B CH CH CH B B	
D 0301	G2070086	DIODE	1SS301 TE85R				
J 0301 J 0302	P0090735 P0090740	CONNECTOR CONNECTOR	9230B-1-13Z005-T 9230B-1-07Z005-T				
L 0302 L 0303	L1690067 L1690074 L1690029 L1690029	COIL COIL COIL	32CS 380NB-R68M=P LQH3NR82M92M00- 32CS 380NB-33NM=P 32CS 380NB-33NM=P				
	G4070001 G4070001	FET FET	SGM2006M-T8 SGM2006M-T8				
R 0306 R 0307 R 0308 R 0310	J24185331 J24185101 J24185471 J24185331 J24185101 J24185000 J24185103 J24185222	CHIP RES.	RMC1/16 331JATP RMC1/16 101JATP RMC1/16 471JATP RMC1/16 331JATP RMC1/16 101JATP RMC1/16 000JATP RMC1/16 103JATP RMC1/16 222JATP	470 330 100 0 10K	1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W	       	
X 0301	Н9500120	XTAL	TCO-918L 12.80M				
XF0303	H1102194 H1102194 H1102187 H1102187	XTAL XTAL XTAL XTAL	58N20B5 58N20B5 22T15BU 22T15BU				
	R3129530	XTAL HOLDER (4 pcs)					

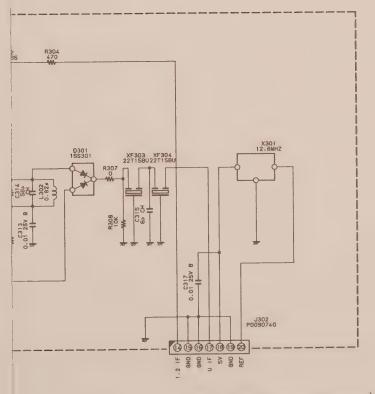
# Notes



(obverse view of "chip-only" side)



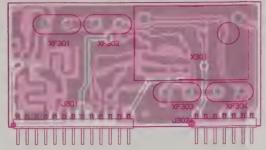
1SS301(B3) (D0301)

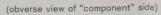


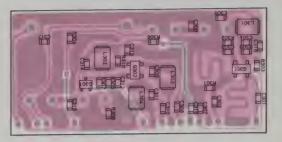
(MIXER UNIT Schematic Diagram)

# Notes

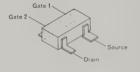
#### MIXER UNIT (No.03XX)



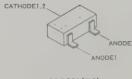




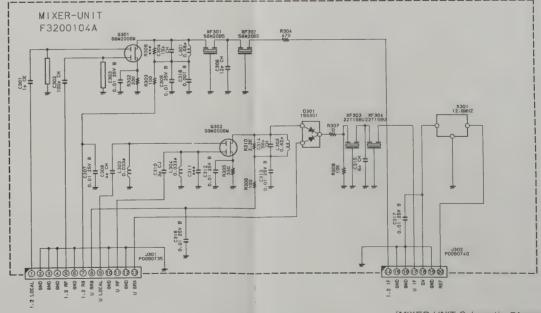
(obverse view of "chip-only" side)



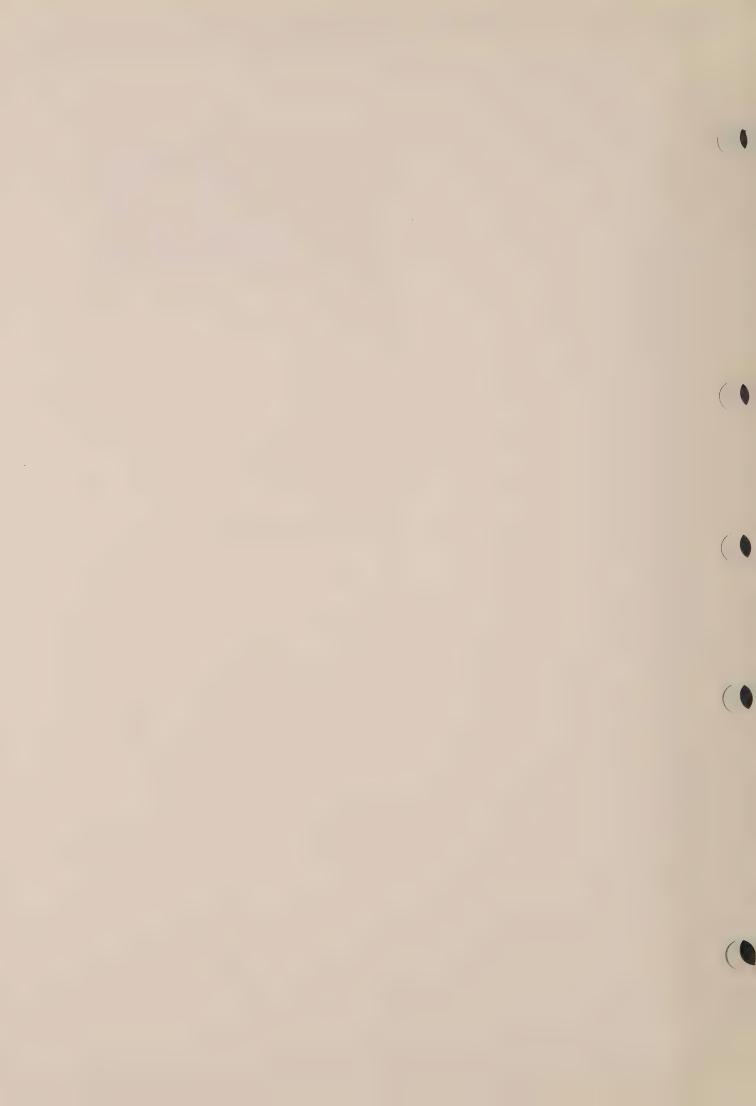
SGM2006M(M-254) (Q0301,Q0302,Q0303)



1SS301(B3) (D0301)



3-10

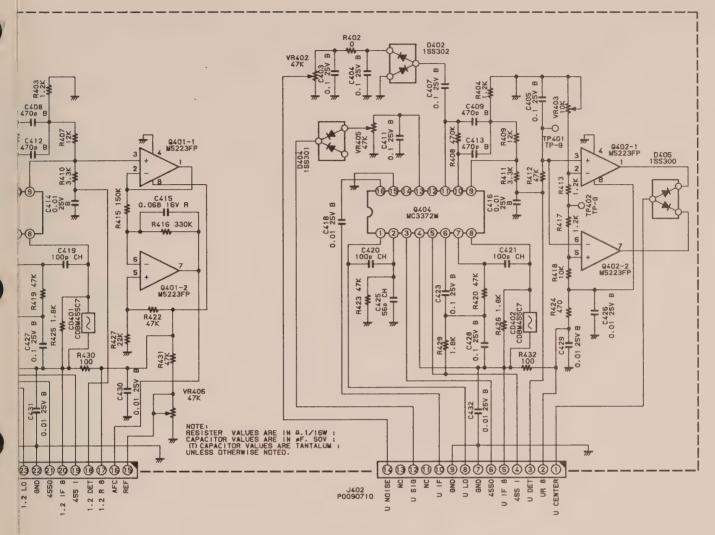


## IF Unit Parts List

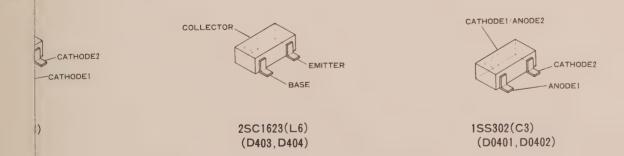
REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV	TOL.	VERS.
		*** IF UNIT ***					
	CA0245001	P.C.B. W COMP.					
	F3200103A	P.C.B. W/O COMP.					
C 0405 C 0406 C 0407 C 0408 C 0409 C 0410 C 0411 C 0412 C 0413 C 0415 C 0416 C 0417 C 0418 C 0419 C 0420 C 0422 C 0422 C 0423 C 0424 C 0425 C 0426 C 0427 C 0428	K22174805 K22144802 K22120805 K22144802 K22144802 K22144802 K22174235 K22174235 K22174235 K22174237 K22174229 K22174229 K22144802 K22140811 K22140811 K22140811 K22140811 K22144802 K22144802 K22144802 K22144802 K22144802	CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP.	GRM40B104M25PT GRM40B104M25PT GRM40B104M25PT GRM40B104M25PT GRM40B104M25PT GRM40B104M25PT GRM40B104M25PT GRM39B471M50PT GRM39B471M50PT GRM39B471M50PT GRM39B471M50PT GRM39B471M50PT GRM39B103M25PT GRM39B103M25PT GRM39B103M25PT GRM39CH101J50PT	0. 1uF 0. 1uF 0. 1uF 470pF 470pF 0. 1uF 470pF 470pF 0. 01uF 0. 01uF 0. 01uF 0. 01uF 0. 01uF 0. 01uF 100pF 100pF 100pF 100pF 100pF 0. 1uF 0. 1uF 0. 1uF 0. 1uF 0. 01uF 0. 01uF 0. 01uF 0. 01uF	25V 25V 25V 25V 25V 25V 25V 50V 50V 25V 25V 25V 25V 50V 50V 25V 25V 25V 25V 25V 25V 25V 25V 25V 25	B B B B B B B B B B B B B B B B B B B	
CD0401 CD0402		CERAMIC DISC CERAMIC DISC	CDBM455C7 CDBM455C7				
D 0401 D 0402 D 0403 D 0404 D 0405	G2070088 G2070086 G2070086	DIODE DIODE DIODE DIODE DIODE	1SS302 TE85R 1SS302 TE85R 1SS301 TE85R 1SS301 TE85R 1SS300 TE85R				
J 0401 J 0402		CONNECTOR CONNECTOR	9230B-1-15Z005-T 9230B-1-14Z005-T				
Q 0401 Q 0402 Q 0403 Q 0404	G1090990 G1091108	IC IC IC IC	M5223FP-72A M5223FP-72A MC3372ML MC3372ML				
R 0401	J24185000	CHIP RES.	RMC1/16 000JATP	0	1/16	SW	

### IF Unit Parts List

Arthur Anna Sala	Mille Englishment in 1980			64		
REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV TOL.	VERS.
R 0402	J24185000	CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 0403		CHIP RES.	RMC1/16 000JATP RMC1/16 122JATP RMC1/16 122JATP RMC1/16 474JATP RMC1/16 123JATP RMC1/16 474JATP	1.2K	1/16W	
R 0404		CHIP RES.	RMC1/16 122JATP	1. 2K	1/16W	
R 0406		CHIP RES.	RMC1/16 474JATP	470K	1/16W	
R 0407	J24185123	CHIP RES.	RMC1/16 123JATP	12K	1/16W	
R 0408	J24185474	CHIP RES.	RMC1/16 474JATP	470K	1/16W	
R 0409		CHIP RES.	RMC1/16 123JATP	12K	1/16W	
R 0410	J24185332	CHIP RES.	RMC1/16 332JATP	3. 3K	1/16W	
R 0411	J24185332	CHIP RES.	RMC1/16 332JATP	3.3K	1/16W	
R 0412		CHIP RES.	RMC1/16 473JATP	47K	1/16W	
R 0413		CHIP RES.	RMC1/16 122JATP	1.2K	1/16W	
R 0415		CHIP RES.	RMC1/16 154JATP	150K	1/16W	
R 0416	J24185334	CHIP RES.	RMC1/16 334JATP	330K	1/16W	
R 0417	J24185122	CHIP RES.	RMC1/16 122JATP	1.2K	1/16W	
R 0418	J24185103	CHIP RES.	RMC1/16 122JATP RMC1/16 154JATP RMC1/16 334JATP RMC1/16 122JATP RMC1/16 103JATP	10K	1/16W	
R 0419	J24185473	CHIP RES.	INIOI/IO TIOUNII	TIL	1/104	
R 0420		CHIP RES.	RMC1/16 473JATP		1/16W	
R 0421		CHIP RES.	RMC1/16 473JATP		1/16W	
R 0422		CHIP RES.	RMC1/16 473JATP		1/16W	
R 0423		CHIP RES.	RMC1/16 473JATP	47K	1/16W	
R 0424	J24185471	CHIP RES.	RMC1/16 471JATP	470	1/16W	
R 0425		CHIP RES.	RMC1/16 182JATP	1.8K	1/16W	
R 0426	J24185182	CHIP RES.	RMC1/16 182JATP RMC1/16 223JATP	1.8K	1/16W	
R 0427		CHIP RES.	RMC1/16 223JATP	22K	1/16W	
R 0428		CHIP RES.	RMC1/16 182JATP	1.8K	1/16W	
R 0429		CHIP RES.		1.8K	1/16W	
R 0430		CHIP RES.	RMC1/16 101JATP		1/16W	
R 0431		CHIP RES.	RMC1/16 473JATP		1/16W	
R 0432	J24185101	CHIP RES.	RMC1/16 101JATP	100	1/16W	
TP0401	Q5000036	TP-G	TP-G MK1095			
TP0402	Q5000036	TP-G	TP-G MK1095			
VR0401	J50785473	POT.	RHO3AVAS4XO1A	47K		
VR0402	J50785473	POT.	RHO3AVAS4XO1A	47K		
VR0403	J50785103	POT.	RHO3AVA14XO1A	10K		
VR0404	J50785473	POT.	RHO3AVAS4XO1A	47K		
VR0405	J50785473	POT.	RHO3AVAS4XO1A	47K		
VR0406	J50785473	POT.	RHO3AVAS4XO1A	47K		



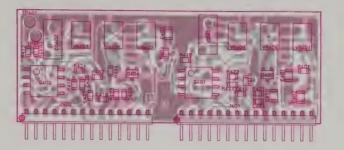
(IF UNIT Schematic Diagram)



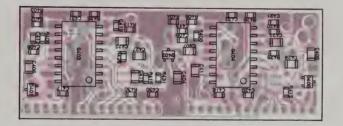
## IF Unit Parts List

REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV TOL.	VERS.
R 0402	J24185000		RMC1/16 000JATP		1/16W	
R 0403 R 0404	J24185122 J24185122	CHIP RES.	RMC1/16 122JATP RMC1/16 122JATP	1 97	1/16W 1/16W	
R 0406	J24185474	CHIP RES.	RMC1/16 122JATP RMC1/16 474JATP RMC1/16 123JATP RMC1/16 474JATP RMC1/16 123JATP RMC1/16 332JATP RMC1/16 332JATP	470K	1/16W	
R 0407	J24185123	CHIP RES.	RMC1/16 123JATP	12K	1/16W	
R 0408	J24185474	CHIP RES.	RMC1/16 474JATP	470K	1/16W	
R 0409	J24185123	CHIP RES.	RMC1/16 123JATP	12K	1/16W	
R 0410	J24185332	CHIP RES.	RMC1/16 332JATP	3. 3K	1/16W	
R 0411	J24185332	CHIP RES.	RMC1/16 33ZJATP RMC1/16 473JATP	3. 3K 47K	1/16W 1/16W	
R 0412 R 0413	J24185473 J24185122	CHIP RES.	RMC1/16 475JATP		1/16W	
R 0415	J24185154	CHIP RES.	RMC1/16 154JATP		1/16W	
R 0416	J24185334	CHIP RES.	RMC1/16 334.TATP	33UK	1/16W	
R 0417	J24185122	CHIP RES.	RMC1/16 122JATP RMC1/16 103JATP RMC1/16 473JATP RMC1/16 473JATP	1.2K	1/16W	
R 0418	J24185103	CHIP RES.	RMC1/16 103JATP	10K	1/16W	
R 0419	J24185473		RMC1/16 473JATP	47K	1/16W	
R 0420	J24185473	CHIP RES.	RMC1/16 473JATP	47K	1/16W	
R 0421	J24185473	CHIP RES.	MMC1/10 4/3JAIF	411	1/16W	
R 0422 R 0423	J24185473 J24185473	CHIP RES. CHIP RES.	RMC1/16 473JATP RMC1/16 473JATP		1/16W 1/16W	
R 0423	J24185471	CHIP RES.	RMC1/16 471JATP		1/16W	
R 0425	J24185182	CHIP RES.	RMC1/16 182 IATP	1 8K	1/16W	
R 0426	J24185182	CHIP RES.	RMC1/16 182JATP RMC1/16 223JATP RMC1/16 182JATP RMC1/16 182JATP	1.8K	1/16W	
R 0427	J24185223	CHIP RES.	RMC1/16 223JATP	22K	1/16W	
R 0428	J24185182	CHIP RES.	RMC1/16 182JATP	1.8K	1/16W	
R 0429	J24185182	CHIP RES.	RMC1/16 182JATP	1.8K	1/16W	
R 0430	J24185101	CHIP RES.	MMCI/IO IUIJAIP	100	1/16W	
R 0431 R 0432	J24185473 J24185101	CHIP RES. CHIP RES.	RMC1/16 473JATP RMC1/16 101JATP	47K 100	1/16W 1/16W	
10 0102	024100101	OHII IUDO.	101101710 10101111	100	1/ 1011	
TP0401	Q5000036	TP-G	TP-G MK1095			
TP0402	Q5000036	TP-G	TP-G MK1095			
VR0401	J50785473	POT.	RHO3AVAS4X01A	47K		
VR0402	J50785473	POT.	RHO3AVAS4XO1A	47K		
VR0403	J50785103	POT.	RHO3AVA14XO1A	10K		
VR0404	J50785473	POT.	RHO3AVAS4XO1A	47K 47K		
VR0405 VR0406	J50785473 J50785473	POT.	RHO3AVAS4XO1A RHO3AVAS4XO1A	47K 47K		

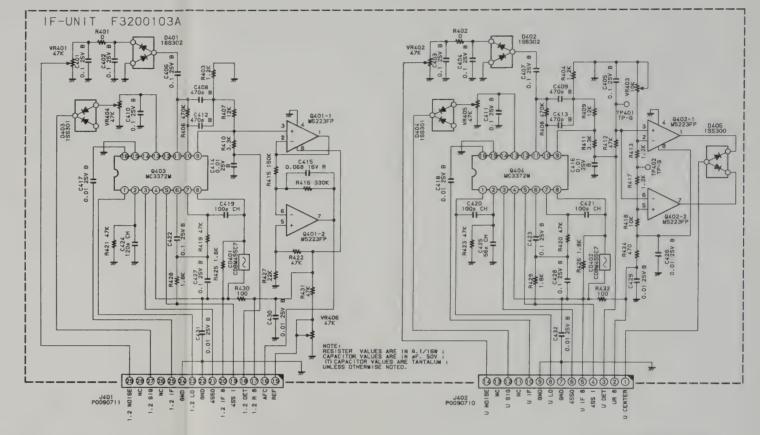
#### IF UNIT (No.04XX)



(obverse view of "component" side)



(obverse view of "chip-only" side)



(IF UNIT Schematic Diagram)



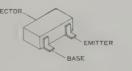
M5223FP (Q0401,Q0402)



MC3372ML (Q0403,Q0404)



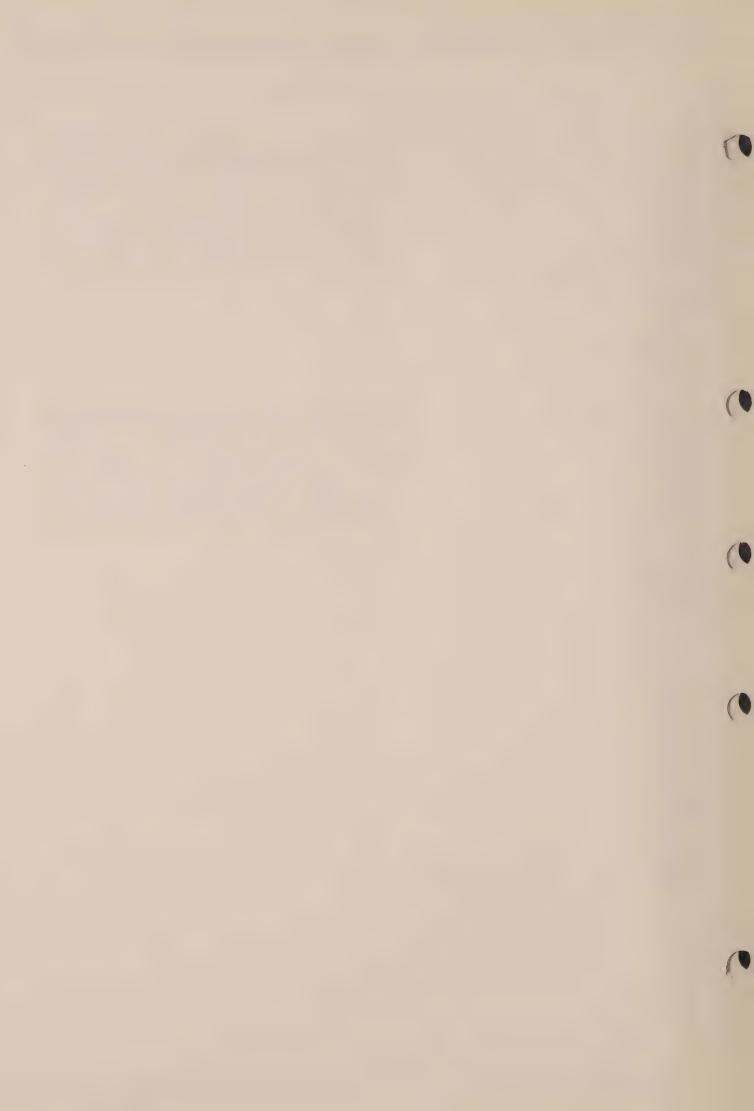
1SS300(A3) (D0405)

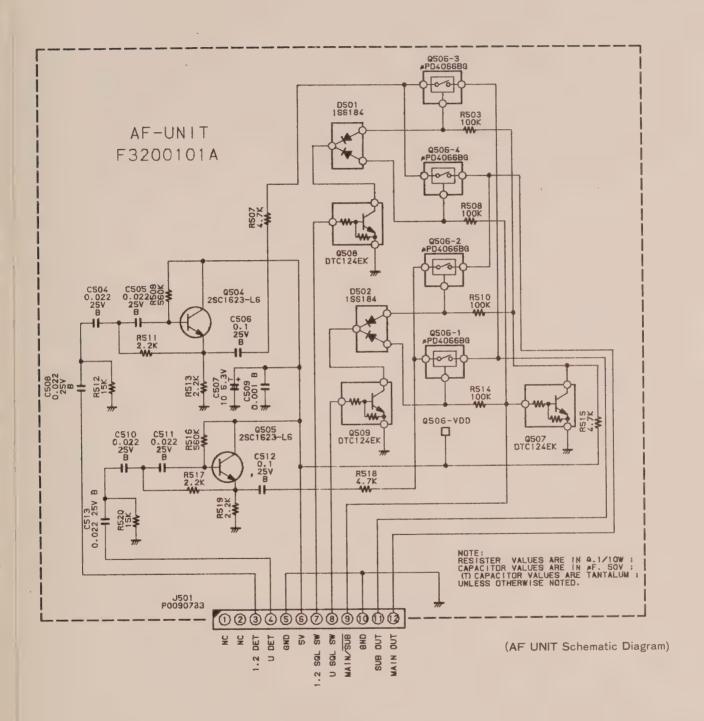


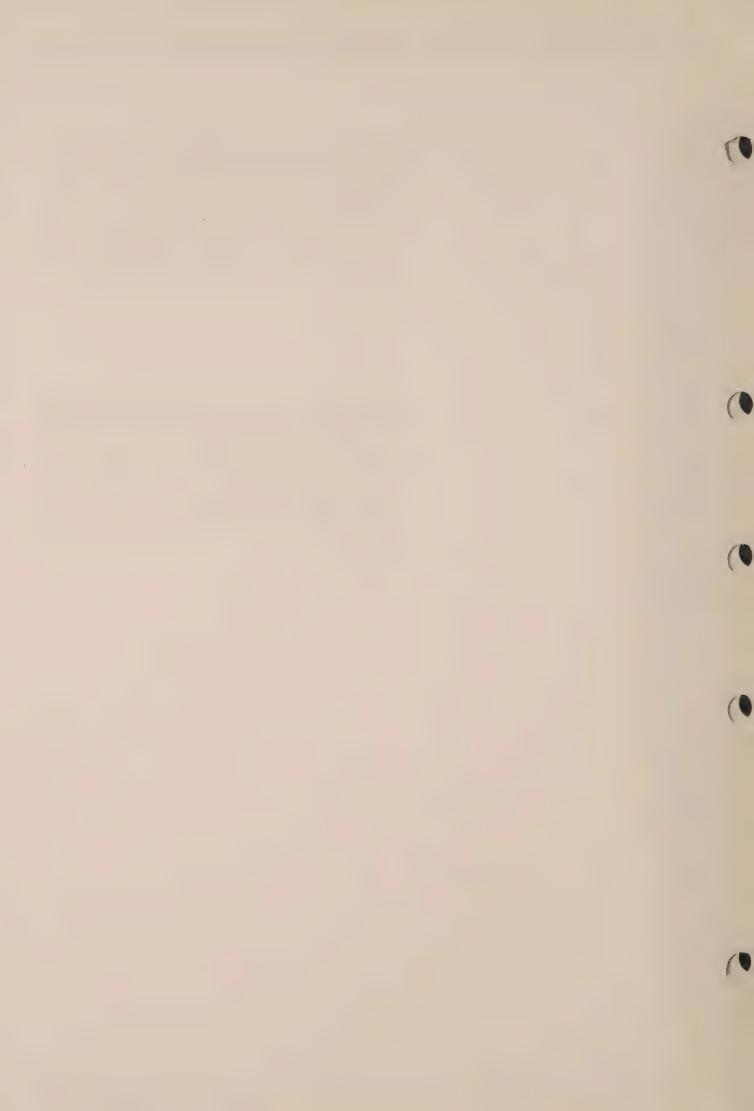
2SC1623(L6) (D403, D404)



1SS302(C3) (D0401,D0402)

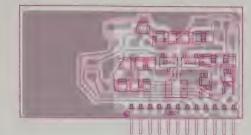




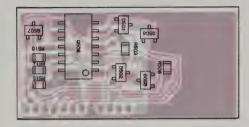


REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV	TOL.	VERS.
		*** AF UNIT ***					
	CA0427001	P.C.B. W COMP.					
	F3200101A	P.C.B. W/O COMP.					
C 0510 C 0511	K22140807 K22140807 K22140811 K78080019 K22140807 K22140807 K22140807 K22140807 K22140807	CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP.	GRM40B223M25PT GRM40B223M25PT GRM40B104M25PT TEMSVB20J106M-8R GRM40B223M25PT GRM40B102M50PT GRM40B223M25PT GRM40B223M25PT GRM40B104M25PT GRM40B223M25PT	0. 022uF 0. 1uF	25V 25V 25V 6. 3V 25V 50V 25V 25V 25V 25V	B B B B B B B B B	
D 0501 D 0502	G2070009 G2070009	DIODE	1SS184 TE85R 1SS184 TE85R				
J 0501	P0090733	CONNECTOR	9230B-1-12Z005-T				
Q 0504 Q 0505 Q 0506 Q 0507 Q 0508 Q 0509	G3316237F G3316237F G1091035 G3070034 G3070034 G3070034	TRANSISTOR TRANSISTOR IC TRANSISTOR TRANSISTOR TRANSISTOR	DTC124EK T97				
R 0503 R 0507 R 0508 R 0509 R 0510 R 0511 R 0512 R 0513 R 0514 R 0515 R 0516 R 0517 R 0517 R 0518 R 0519 R 0520	J24205104 J24205472 J24205104 J24205564 J24205104 J24205222 J24205153 J24205222 J24205472 J24205564 J24205222 J24205472 J24205472 J24205472 J24205472 J24205472 J24205564	CHIP RES.	RMC1/10T 104J RMC1/10T 472J RMC1/10T 104J RMC1/10T 564J RMC1/10T 104J RMC1/10T 222J RMC1/10T 153J RMC1/10T 222J RMC1/10T 104J RMC1/10T 472J RMC1/10T 564J RMC1/10T 564J RMC1/10T 222J RMC1/10T 472J RMC1/10T 472J RMC1/10T 222J RMC1/10T 222J RMC1/10T 153J	100K 4. 7K 100K 560K 100K 2. 2K 15K 2. 2K 100K 4. 7K 560K 2. 2K 4. 7K 2. 2K 15K	1/10W 1/10W 1/10W 1/10W 1/10W 1/10W 1/10W 1/10W 1/10W 1/10W 1/10W 1/10W 1/10W		

#### AF UNIT (No.05XX)



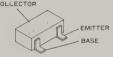
(obverse view of "component" side)



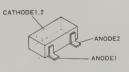
(obverse view of "chip-only" side)



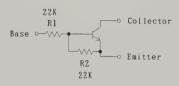
μPD4066BG (Q0506)



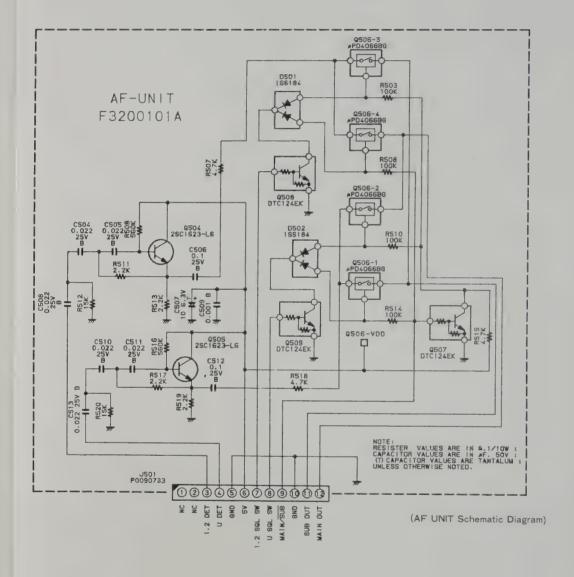
2SC1623(L6) (Q0504,Q0505) DTC124EK(25) (Q0507,Q0508,Q0509)



1SS184(B3) (D0501, D0502)



DTC124EK CIRCUIT DIAGRAM



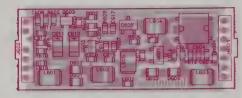


REF.	YAESU P/N	DESCRIPTION		
		*** 430 VCO UNIT **	*	
	CA0429001	P.C.B. W COMP.		
	F3170101A	P.C.B. W/O COMP.		
C 0602 C 0603 C 0604 C 0606 C 0607 C 0608 C 0609 C 0610 C 0611 C 0612 C 0613 C 0614 C 0615 C 0616 C 0617 C 0618 C 0619	K22174803 K22174809 K22174235 K22174202 K22174809 K22174809 K78100015 K78100015 K22174809 K22174207 K22174202 K22174202 K22174204 K22174809 K22174809 K22174809 K22174809	CHIP CAP. TANTALUM CHIP CAP. TANTALUM CHIP CAP.		(obverse view of "solder" side)  CATHODE  ANODE  4116GR(LG)  1SS153(A9)
D 0601 D 0602 D 0603 D 0604 D 0605	G2070114 G2070114 G2070118 G2070118 G2070032	DIODE DIODE DIODE DIODE DIODE	1	(D0605) 4226(R22) 1602)
J 0601 J 0602	P0090788 P0090807	CONNECTOR CONNECTOR	9:	
L 0601 L 0602 L 0603 L 0604 L 0605	L1690016 L1690016 L1690016 L1690016 L1690016	COIL COIL COIL	3; 3; 3; 3; 3;	C613 6p CH 10k 9601 2SK1577 C615 1p CK 2SC4226-R22
Q 0601 Q 0602 Q 0603	G3815777 G3342267B G3341167G	FET TRANSISTOR TRANSISTOR	2; 2; 2;	1000 W W W W W W W W W W W W W W W W W W
R 0601 R 0602 R 0603 R 0604 R 0605 R 0606 R 0607 R 0608 R 0609 R 0610 R 0611	J24185471 J24185103 J24185104 J24185100 J24185222 J24185560 J24185222 J24185103 J24185470 J24185101 J24185150 J24185150 J24185102	CHIP RES.	RI R	NOTE: RESISTER VALUES ARE IN A.1/16W: CAPACITOR VALUES ARE IN AF. 50V: (1) CAPACITOR VALUES ARE IN H. SOV: INDUCTOR VALUES ARE IN H. UNLESS OTHERWISE NOTED.  (430-VCO UNIT Schematic Diagram)
T 0601	L0022098	COIL	E	



REF. YAESU P/	N DESCRIPTION	MFGR'S DESIG.	VALUE	WV	TOL.	VERS.
	*** 430 VCO UNIT **	**				
CA042900	1 P.C.B. W COMP.					
F3170101	A P.C.B. W/O COMP.					
C 0602 K2217480 C 0603 K2217480 C 0604 K2217480 C 0606 K2217420 C 0607 K2217420 C 0608 K2217480 C 0609 K2217480 C 0610 K7810001 C 0611 K7810001 C 0612 K2217480 C 0613 K2217420 C 0614 K2217420 C 0615 K2217420 C 0616 K2217420 C 0617 K2217480 C 0618 K2217480 C 0618 K2217480	9 CHIP CAP. 9 CHIP CAP. 5 CHIP CAP. 2 CHIP CAP. 9 CHIP CAP. 9 CHIP CAP. 5 TANTALUM CHIP CAP. 5 TANTALUM CHIP CAP. 7 CHIP CAP. 2 CHIP CAP. 2 CHIP CAP. 4 CHIP CAP. 9 CHIP CAP. 9 CHIP CAP.	TEMSVA1A335M-8R	0.001uF 100pF 1pF 0.001uF 0.001uF 3.3uF 3.3uF 0.001uF 6pF 1pF 1pF 3pF 0.001uF	50V 50V 50V 50V 50V 50V 10V 10V 50V 50V 50V 50V 50V 50V 50V	B B CH CK B B CH CK CK CJ B B	
D 0601 G2070114 D 0602 G2070114 D 0603 G2070118 D 0604 G2070118 D 0605 G2070032	DIODE DIODE	1T363-01-T08A 1T363-01-T08A HSU277 HSU277 1SS153-T2B				
J 0601 P0090788 J 0602 P0090807		9230B-1-07Z021-T 9230B-1-06Z023-T				
L 0601 L1690016 L 0602 L1690016 L 0603 L1690016 L 0604 L1690016 L 0605 L1690016	COIL	32CS 380LB-1R0M=P 32CS 380LB-1R0M=P 32CS 380LB-1R0M=P 32CS 380LB-1R0M=P 32CS 380LB-1R0M=P	1uH 1uH 1uH 1uH 1uH			
Q 0601 G3815777 Q 0602 G3342267 Q 0603 G3341167	B TRANSISTOR	2SK1577 2SC4226-T2B R22 2SC4116GR TE85R				
R 0601 J2418547 R 0602 J2418510 R 0603 J2418510 R 0604 J2418510 R 0605 J2418522 R 0606 J2418556 R 0607 J2418522 R 0608 J2418510 R 0609 J2418547 R 0610 J2418515 R 0612 J2418510	3 CHIP RES. 4 CHIP RES. 0 CHIP RES. 2 CHIP RES. 0 CHIP RES. 3 CHIP RES. 0 CHIP RES. 1 CHIP RES. 0 CHIP RES.	RMC1/16 471JATP RMC1/16 103JATP RMC1/16 104JATP RMC1/16 100JATP RMC1/16 222JATP RMC1/16 560JATP RMC1/16 222JATP RMC1/16 103JATP RMC1/16 470JATP RMC1/16 101JATP RMC1/16 150JATP RMC1/16 102JATP	470 10K 100K 10 2. 2K 56 2. 2K 10K 47 100 15	1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W		
T 0601 L0022098	COIL	EIV-4ENOO9EN				

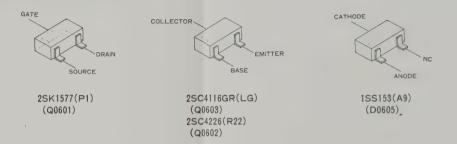
#### 430-VCO UNIT (No.06XX)

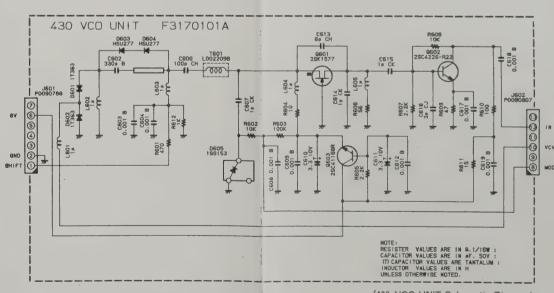


(obverse view of "component" side)

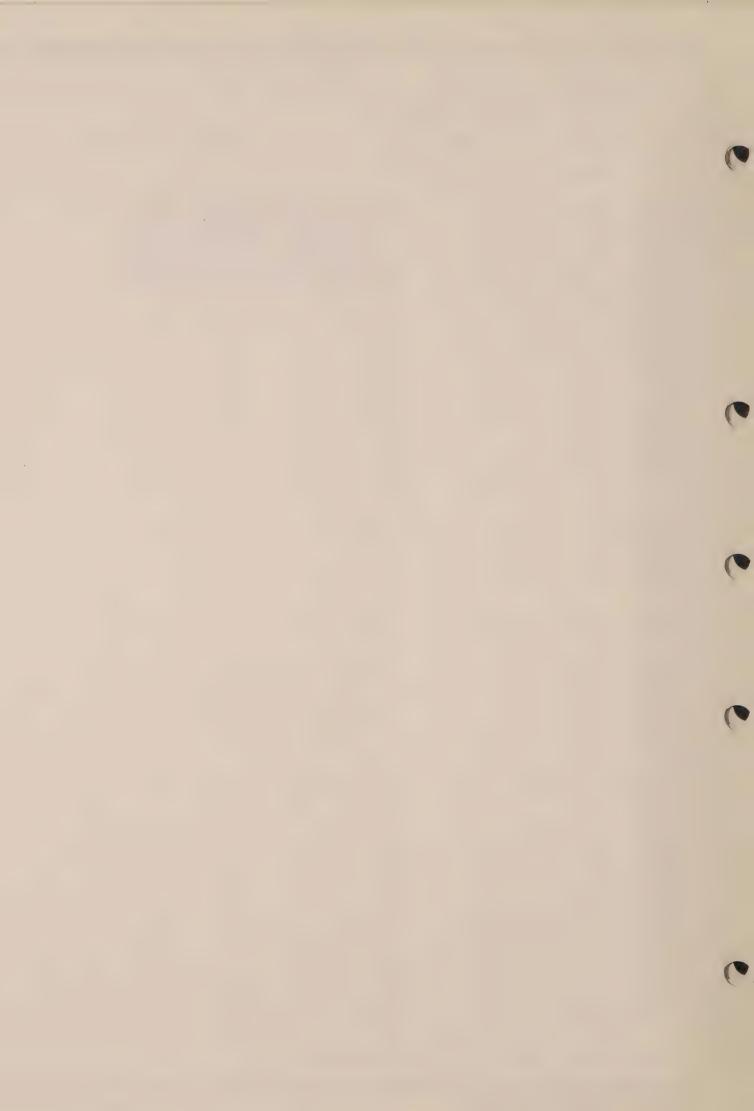


(obverse view of "solder" side)

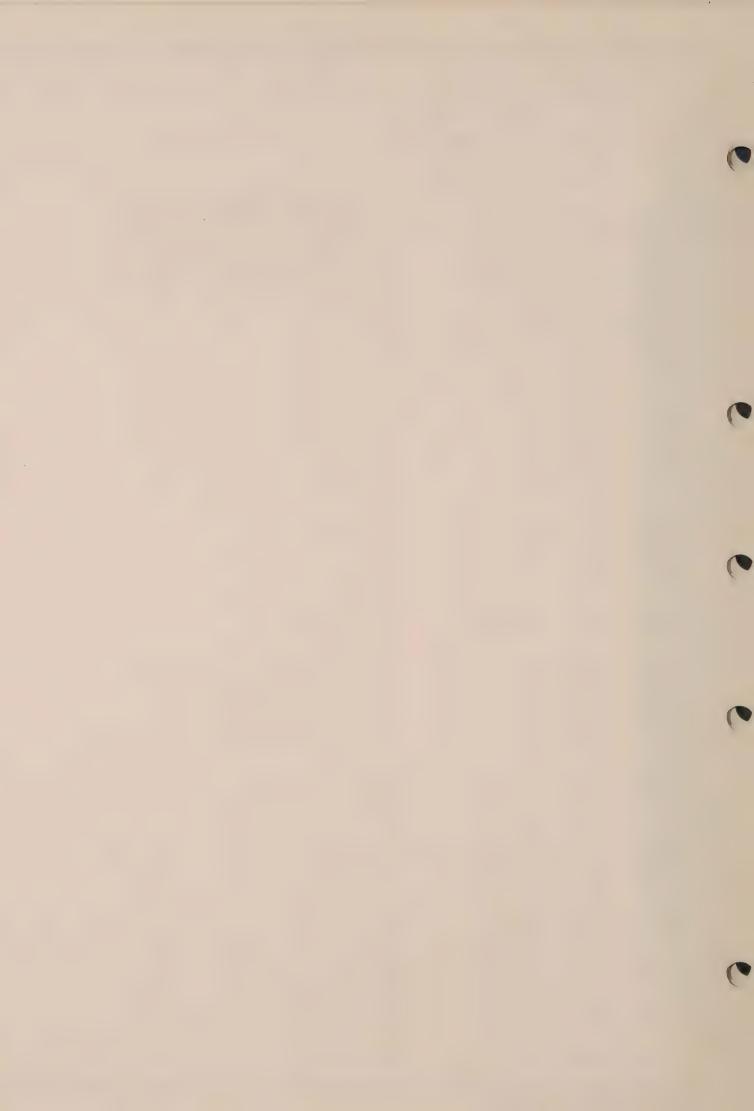




(430-VCO UNIT Schematic Diagram)

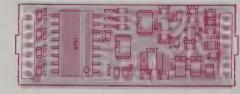


REF.	YAESU P/N	DESCRIPTION	
		*** 430 PLL UNIT **	*
	CA0431001	P.C.B. W COMP.	
	F3169102	P.C.B. W/O COMP.	
C 0701 C 0702 C 0703 C 0704 C 0705 C 0706 C 0707 C 0708 C 0709 C 0710 C 0711 C 0712 C 0715 C 0716 C 0717	K22174206 K22174235 K22174235 K22174204 K22174204 K22144802 K78100010 K22174809 K22174809 K22174809 K22174809 K22174809 K22174809 K22174809 K22174809 K22174809 K22140811	CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. TANTALUM CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP.	GR G
L 0701 L 0702	L1690029 L1690055	COIL COIL	F3170102 32 32
Q 0701 Q 0702 Q 0703	G1091123 G3342157Y G3115867Y	IC TRANSISTOR TRANSISTOR	MI 25 CLOCK 25 PART OF THE PAR
R 0701 R 0702 R 0703 R 0704 R 0705 R 0706 R 0707 R 0708 R 0709 R 0710 R 0711	J24185150 J24185150 J24185683 J24185333 J24185471 J24185471 J24185472 J24185472 J24185222 J24185102 J24185222	CHIP RES.	RI R
			ALUES ARE IN Q.1/16W: ALUES ARE IN AF. 50V: R VALUES ARE TANTALUM: ALUES ARE IN H RWISE NOTED.
			(430-PLL UNIT Schematic Diagram)



REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV	TOL.	VERS.
		*** 430 PLL UNIT **	*				
	CA0431001	P.C.B. W COMP.					
	F3169102	P.C.B. W/O COMP.					
C 0701 C 0702 C 0703 C 0704 C 0705 C 0706 C 0707 C 0708 C 0709 C 0710 C 0711 C 0712 C 0715 C 0716 C 0717	K22174809 K22174809 K22174809 K22144802	CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. TANTALUM CHIP CAP.	GRM39CH050C50PT GRM39CH101J50PT GRM39CH101J50PT GRM39CH101J50PT GRM39CH101J50PT GRM39CH030C50PT GRM39B103M25PT TESVB21A475M8R GRM39B102M50PT GRM39B102M50PT GRM39B102M50PT GRM39B103M25PT DN1A4R7M1S GRM39B102M50PT GRM39B102M50PT GRM40B104M25PT GRM40B104M25PT	5pF 100pF 100pF 100pF 3pF 0.01uF 4.7uF 0.001uF 0.001uF 0.01uF 4.7uF 0.001uF 0.1uF 0.1uF	50V 50V 50V 50V 50V 25V 10V 50V 50V 25V 10V 50V 25V 25V	CH CH CH CJ B B B B B	
L 0701 L 0702	L1690029 L1690055	COIL	32CS 380NB-33NM=P 32CS 380HB-221K=P	0.033uH 220uH			
Q 0701 Q 0702 Q 0703	G1091123 G3342157Y G3115867Y	IC TRANSISTOR TRANSISTOR	MB1504PF-G-BND-TF 2SC4215Y TE85R 2SA1586Y TE85R				
R 0701 R 0702 R 0703 R 0704 R 0705 R 0706 R 0707 R 0708 R 0709 R 0710 R 0711 R 0711		CHIP RES.	RMC1/16 150JATP RMC1/16 150JATP RMC1/16 150JATP RMC1/16 683JATP RMC1/16 333JATP RMC1/16 471JATP RMC1/16 471JATP RMC1/16 104JATP RMC1/16 472JATP RMC1/16 222JATP RMC1/16 102JATP RMC1/16 222JATP	100K 4.7K	1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W		

#### 430-PLL UNIT (No.07XX)



(obverse view of "component" side)

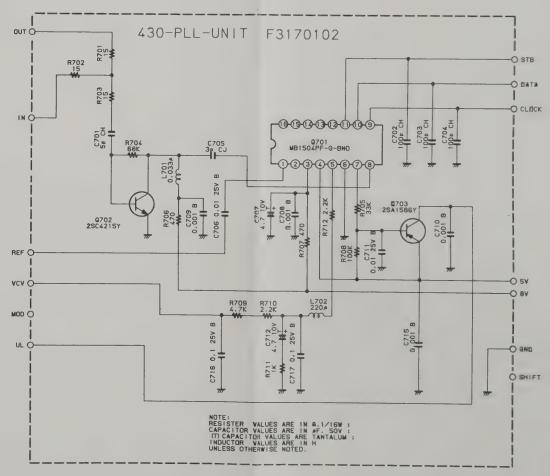


MB1504PF (Q0701)



(obverse view of "solder" side)





(430-PLL UNIT Schematic Diagram)



### 1.2G- VCO Unit Parts List

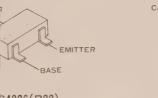
REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV	TOL.	VERS.
		*** 1.2G VCO UNIT *	**				
	CA0246001	P.C.B. W COMP.					
	F3201101	P.C.B. W/O COMP.					
C 0801 C 0802 C 0803 C 0804 C 0805 C 0806 C 0807 C 0808 C 0809 C 0810 C 0811 C 0812 C 0813 C 0814 C 0815 C 0816 C 0817 C 0818 C 0819 C 0820 C 0822 C 0823 C 0824 C 0825	K22174809 K22174201 K22174201 K22174202 K22174203 K22174204 K22174205 K22174205 K22174205 K22174202 K22174208 K22174201	CHIP CAP. TANTALUM CHIP CAP. TANTALUM CHIP CAP. CHIP CAP.	GRM39CK020C50PT GRM39CJ030C50PT GRM39CH040C50PT GRM39CK010C50PT GRM39CK010C50PT GRM39CK010C50PT GRM39CH070J50PT GRM39CH070D50PT GRM39CH070D50PT GRM39CK010C50PT GRM39CK010C50PT GRM39CK010C50PT GRM39CK010C50PT GRM39CH060D50PT GRM39CH060D50PT GRM39CH060D50PT GRM39CH101J50PT TEMSVA1A335M-8R TEMSVB21A685M-8R GRM39CH101J50PT	33pF 0.5pF 0.5pF 1pF 2pF 3pF 4pF 1pF 4pF 1pF 47pF 100pF 7pF 7pF 1pF 1pF 1pF 6pF 0.001uF 470pF 100pF 3.3uF 6.8uF 100pF	50V 50V 50V 50V 50V 50V 50V 50V 50V 50V	B CH CK CK CK CH CH CH CH CH CH CH CH	
D 0801 D 0802 D 0803	G2070102 G2070102 G2070032	DIODE DIODE DIODE	GRM39CH100D50PT 1T362-T8 1T362-T8 1SS153-T2B	10pF	50V	СН	
J 0801 J 0802	P0090788 P0090807	CONNECTOR CONNECTOR	9230B-1-07Z021-T 9230B-1-06Z023-T				
L 0801 L 0802 L 0803 L 0804 L 0805 L 0806	L1690019 L1690029 L1690136 L1690024 L1690019 L1690056	COIL COIL M. RFC COIL COIL COIL	32CS 380NB-R10M=P 32CS 380NB-33NM=P ELJ-NC15NKF 32CS 380NB-68NM=P 32CS 380NB-R10M=P 32CS 380NB-10NM=P	0. 1uH 0. 033uH 0. 001 0. 068uH 0. 1uH 0. 01uH			
Q 0801 Q 0802 Q 0803	G3805087B G3342267B G3341167G	FET TRANSISTOR TRANSISTOR	2SK508-T2B K52 2SC4226-T2B R22 2SC4116GR TE85R				
R 0801 R 0802 R 0803 R 0804 R 0805 R 0806 R 0807	J24185470 J24185470 J24185100 J24185103 J24185223 J24185820 J24185470	CHIP RES.	RMC1/16 470JATP RMC1/16 470JATP RMC1/16 100JATP RMC1/16 103JATP RMC1/16 223JATP RMC1/16 820JATP RMC1/16 470JATP	47 47 10 10K 22K 82 47	1/16W 1/16W 1/16W 1/16W 1/16W 1/16W		

# 1.2G- VCO Unit Parts List

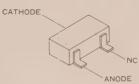
REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV	TOL.	VERS.
R 0808	J24185392	CHIP RES.	RMC1/16 392JATP	3.9K	1/16W		
R 0809	J24185223	CHIP RES.	RMC1/16 223JATP	22K	1/16W		
R 0810	J24185221	CHIP RES.	RMC1/16 221JATP	220	1/16W		
R 0811	J24185000	CHIP RES.	RMC1/16 000JATP	0	1/16W		
R 0812	J24185102	CHIP RES.	RMC1/16 102JATP	1K	1/16W		



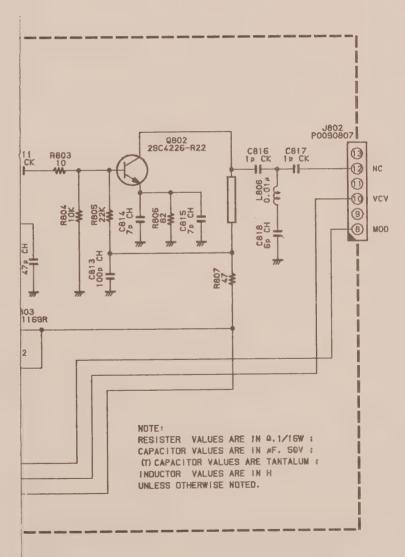
(obverse view of "solder" side)



C4226(R22) 20802) C4116GR(LG) 00803)



1SS153(A9) (Q0803)



(1.2G-VCO UNIT Schematic Diagram)

# 1.2G- VCO Unit Parts List

REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV TOL.	VERS.
	J24185392		RMC1/16 392JATP	3. 9K	1/16W	
	J24185223 J24185221		RMC1/16 223JATP RMC1/16 221JATP	22K 220	1/16W 1/16W	
R 0811 R 0812	J24185000 J24185102	CHIP RES.	RMC1/16 000JATP RMC1/16 102JATP	0 1K	1/16W 1/16W	

#### 1.2G-VCO UNIT (No.08XX)





(obverse view of "component" side)

(obverse view of "solder" side)

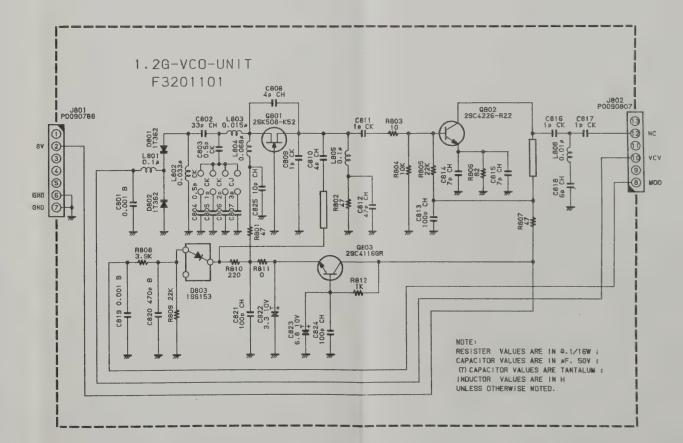




15S153(A9) (Q0803)

2SK508 (K52) (Q0801)

2SC4226(R22) (Q0802) 2SC4116GR(LG) (D0803)



(1.2G-VCO UNIT Schematic Diagram)



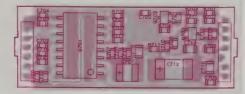
REF.	YAESU P/N	DESCRIPTION	<u> </u>
		*** 1.2G PLL UNIT *	**
	CA0282001	P.C.B. W COMP.	
	F3170102A	P.C.B. W/O COMP.	
C 1701	K22174203	CHIP CAP.	GF
C 1702 C 1703	K22174235 K22174235	CHIP CAP.	GH GHe) (obverse view of "solder" side)
C 1704 C 1705	K22174235 K22174203	CHIP CAP. CHIP CAP.	GF
C 1706 C 1707	K22144802 K78100010	CHIP CAP. TANTALUM CHIP CAP.	GF TE COLLECTOR
C 1708 C 1709	K22174809 K22174235	CHIP CAP. CHIP CAP.	GH GH
C 1710	K22174809	CHIP CAP.	GF RASE
C 1711 C 1712	K22144802 K78140011	CHIP CAP. TANTALUM CHIP CAP.	GF TF 2SA1586Y(SO) (Q1703)
C 1713 C 1714	K22120805 K22174809	CHIP CAP. CHIP CAP.	GF 2SC4226(R22) GF (Q1702)
C 1715 C 1716	K22174809 K78160024	CHIP CAP. TANTALUM CHIP CAP.	GP TF
C 1717 C 1718	K22174235 K22174235	CHIP CAP.	GF GF
C 1719	K22120805	CHIP CAP.	GI <sup>2</sup> OUT
C 1720 C 1721	K22174235 K22174235	CHIP CAP.	GF G STB1.2
Q 1701	G1091124	IC	ME DATA
Q 1702 Q 1703	G3342267B G3115867Y	TRANSISTOR TRANSISTOR	25 CLOCK 25 STORE CARROLL STOR
R 1701	J24185150	CHIP RES.	RN 0290600
R 1702 R 1703	J24185150 J24185150	CHIP RES. CHIP RES.	RN
R 1704 R 1705	J24185683 J24185333	CHIP RES. CHIP RES.	RICE SEE LESS
R 1706 R 1707	J24185471 J24185470	CHIP RES.	RN 2012   100   10
R 1708 R 1709	J24185104 J24185103	CHIP RES. CHIP RES.	RN
R 1710	J24185682 J24185102	CHIP RES.	N
R 1711 R 1712	J24185331	CHIP RES.	
			ALUES ARE IN 4.1/16W :
			ALUES ARE IN 9.1/16W: ALUES ARE IN 9F. 50V: R VALUES ARE TANTALUM: RWISE NOTED.

(1.2G-PLL UNIT Schematic Diagram)



						_	
REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV	TOL.	VERS.
		*** 1.2G PLL UNIT *	***				
	CA0282001	P.C.B. W COMP.					
	F3170102A	P.C.B. W/O COMP.					
C 170: C 171:	2 K22174235 3 K22174235 4 K22174203 5 K22174203 6 K22174203 6 K22174809 9 K22174235 0 K22174809 1 K22144802 2 K78140011 3 K22120805 4 K22174809 5 K22174809 6 K22174809 6 K22174809 6 K22174235 8 K22174235 9 K22174235 9 K22174235 0 K22174235	CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. TANTALUM CHIP CAP.	GRM39B102M50PT GRM39CH101J50PT GRM39B102M50PT GRM39B103M25PT TESVC1E475M12R GRM40R683M16PT GRM39B102M50PT GRM39B102M50PT	2pF 100pF 100pF 100pF 2pF 0.01uF 4.7uF 0.001uF 0.001uF 4.7uF 0.068uF 0.001uF 0.001uF 0.001uF 0.068 100pF 100pF 0.068uF	50V 50V 50V 50V 50V 25V 10V 50V 50V 25V 25V 16V 50V 50V 50V 50V 50V 50V 50V 50V 50V 50	CK CH CH CK B B CH B B CH CH CH CH	
Q 1700 Q 1700 Q 1700	2 G3342267B	IC TRANSISTOR TRANSISTOR	MB1507PF-G-BND-TF 2SC4226-T2B R22 2SA1586Y TE85R				
R 1700 R 1700 R 1700 R 1700 R 1700 R 1700 R 1700 R 1710 R 1711 R 1711	2 J24185150 3 J24185150 4 J24185683 5 J24185333 6 J24185471 7 J24185470 8 J24185104 9 J24185103 0 J24185682 1 J24185102	CHIP RES.	RMC1/16 150JATP RMC1/16 150JATP RMC1/16 150JATP RMC1/16 683JATP RMC1/16 333JATP RMC1/16 471JATP RMC1/16 470JATP RMC1/16 104JATP RMC1/16 103JATP RMC1/16 682JATP RMC1/16 102JATP RMC1/16 331JATP	15 15 15 68K 33K 470 47 100K 10K 6. 8K 1K 330	1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W		

#### 1.2G-PLL UNIT (No.17XX)

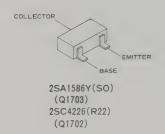


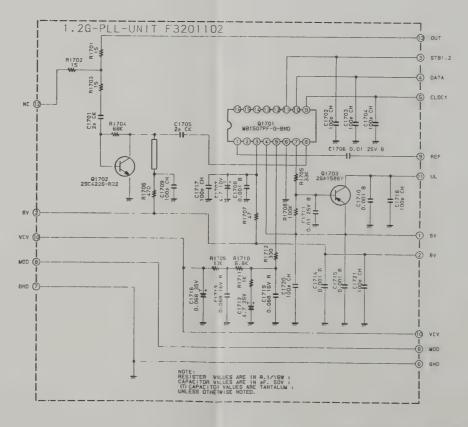
(obverse view of "component" side)



(obverse view of "solder" side)







(1.2G-PLL UNIT Schematic Diagram)



	YAESU P/N	DESCRIPTION	MFGR'S DESIG.			TOL.	VERS.
		*** MAIN UNIT ***					
		P.C.B. W COMP. P.C.B. W 1.2G VCO/PL P.C.B. W 1.2G VCO/PL					
	F3198000A	P.C.B. W/O COMP.					
C 1002 C 1003 C 1004 C 1005 C 1007 C 1008 C 1009 C 1010 C 1011 C 1012 C 1013 C 1014 C 1015 C 1016 C 1018 C 1019 C 1020 C 1021 C 1022 C 1023 C 1024 C 1025 C 1026 C 1027 C 1029 C 1030 C 1031	K22170805 K22170213 K22170207 K22170221 K22170201 K22170201 K22170204 K22170206 K22170209 K22170209 K22170200	CHIP CAP. AL. ELECTRO. CAP. AL. ELECTRO. CAP. AL. ELECTRO. CAP. AL. ELECTRO. CAP.	GRM40CJ030C50PT GRM40CH050C50PT GRM40CH220J50PT GRM40CK020C50PT GRM40CK010C50PT GRM40CK010C50PT GRM40CK010C50PT GRM40CK010C50PT GRM40CK010C50PT GRM40CK010C50PT GRM40CK010C50PT GRM40CK010C50PT GRM40CK010C50PT 16V100M4X7TR2	0.001uF 12pF 6pF 27pF	16V 50V 50V 50V 50V 50V 50V 50V 50V 50V 50	B CH	

REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE		TOL.	VERS.
0 1052	V9917499E	CHID CAD	CDM20CU101 IEODT	100pF	50V	СН	
C 1054	K22174809	CHIP CAP.	GRM39B102M50PT	0.001uF		В	
C 1055	K22174235	CHIP CAP.	GRM39CH101J50PT	100pF	50V	CH	
C 1056	K22170203	CHIP CAP.	GRM40CK020C50PT	2pF	50V	CK	
C 1057	K22174235	CHIP CAP.	GRM39CH101J50PT	100pF	50V	CH	
C 1058	K22174235	CHIP CAP.	GRM39CH101J50PT	100pF	50V	СН	
C 1059	K22170235	CHIP CAP.	GRM40CH101J50PT	100pF	50V	СН	
C 1060	K22174207	CHIP CAP.	GRM39CH060D50PT	6pF	50V	СН	
C 1004	K78120009	TANTALUM CHIP CAP.	1E2AUCTO2MI-9K	lur	16V		
C 1063	K22174809	CHIP CAP.	GRM39B102M50PT	0.001uF	50V	В	
C 1064	K22174235	CHIP CAP. CHIP CAP.	GRM39CH101J50PT	100pF	50V	СН	
C 1065	K22174235	CHIP CAP.	GRM39CH101J50PT	100pF		СН	
C 1066	K78120009	TANTALUM CHIP CAP.	TESVA1C105M1-8R	1uF	16V		
C 1067	K2Z174809	CHIP CAP.	GRM39B102M50PT	0.001uF	50V	В	
C 1068	KZZ174203	CHIP CAP.	GRM39CKUZUC50PT	2pF	50V	CK	
C 1069	KZZ174ZU3	CHIP CAP.	GRM39CKUZUC50PT	2pF	50V	CK	
C 1070	KZZ17U8U5	CHIP CAP. TANTALUM CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP.	GKM4UBIUZM5UPI	0.001uF	50V	В	
C 1071	K781UUU17	TANTALUM CHIP CAP.	TEMSVB21A106M-8R	10uF	10V	OII	
C 1072	KZZ17UZ13	CHIP CAP.	CRM40CH1ZUJ5UPT	12pF		CH	
C 1073	K2217UZI3	CHIP CAP.	CDM20D102ME0DT	12pF		CH	
C 1074 C 1076	K221748U9	CHID CAD	CDM/OD102MEODT	0.001uF	50V	В	
C 1076	K78100017	TANTALIM CUID CAD	TRUCTIONTOURI	0.01uF	50V	В	
C 1077	K22170817	CHIP CAP	CRM/UBIUSMEUDT	10uF	10V	D	
C 1078	K22170017	TANTALUM CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. TANTALUM CHIP CAP.	GRMADR103MEDDT	0.01uF 0.001uF	50V 50V	B B	
C 1079	K22170805	CHIP CAP	GRM40B102M50F1	0.001ur 0.001uF	50V	В	
C 1081	K22174809	CHIP CAP	GRM39R102M50PT	0.001ur 0.001uF	50V	В	
C 1082	K22170805	CHIP CAP	GRM40R102M50PT	0.001ur	50V	В	
C 1083	K22174809	CHIP CAP.	GRM39B102M50PT	0.001uF	50V	В	
C 1085	K22174235	CHIP CAP.	GRM39CH101.I50PT	100pF	50V	CH	
C 1086	K22170219	CHIP CAP.	GRM40CH220.I50PT	22pF		CH	
C 1087	K22170239	CHIP CAP.	GRM40CH151J50PT	150pF	50V	CH	
C 1088	K22170817	CHIP CAP.	GRM40B103M50PT	0.01uF	50V	В	
C 1089		TANTALUM CHIP CAP.	TEMSVA1A335M-8R	3. 3uF	107		
C 1090	K22170817		GRM40B103M50PT	0.01uF	50V	В	
C 1091	K22170239		GRM40CH151J50PT		50V	СH	
C 1092	K22170805		GRM40B102M50PT	0.001uF	50V	В	
C 1093		AL. ELECTRO. CAP.	16V100M4X7TR2	10uF	16V		
C 1094	K22174809	CHIP CAP.	GRM39B102M50PT		50V	В	
C 1095	K22170817		GRM40B103M50PT	0.01uF	50V	B	
C 1096	K22170817	CHIP CAP.	GRM40B103M50PT	0.01uF	50V	В	
C 1097	K22170805	CHIP CAP.	GRM40B102M50PT	0.001uF	50V	В	
C 1098	K70127106	TANTALUM CAP.	DN1C100M1S	10uF	16V		
C 1099	K22170805		GRM40B102M50PT		50V	В	
C 1100		TANTALUM CAP.	DN1C4R7M1S	4. 7uF	16V		
C 1101	K22174231		GRM39CH680J50PT		50V	СН	
C 1102	K22174211	CHIP CAP.	GRM39CH100D50PT	10pF	50V	СН	
C 1103	K22174209		GRM39CH080D50PT	8pF	507	СН	
C 1104	K22170202		GRM40CK010C50PT	1pF	50V	CK	
C 1105		CHIP CAP.	GRM40CH100D50PT	10pF	50V	СН	
C 1106		AL. ELECTRO. CAP.	50V010M4X7TR2	1uF	50V		
C 1107	K22170215		GRM40CH150J50PT	15pF	50V	СН	
C 1108	K22170211	CHIP CAP.	GRM40CH100D50PT	10pF	50V	СН	
C 1109	K40129067	AL. ELECTRO. CAP.	RE3-16V102M	1000uF	16V		
C 1110	K22170805		GRM40B102M50PT	0.001uF	50V	В	
C 1111 C 1112	K46120004 K22170204	AL. ELECTRO. CAP.	16V100M4X7TR2	10uF	16V	0.1	
0 1112	NZZ11UZU4	CHIP CAP.	GRM40CJ030C50PT	3pF	50V	CJ	

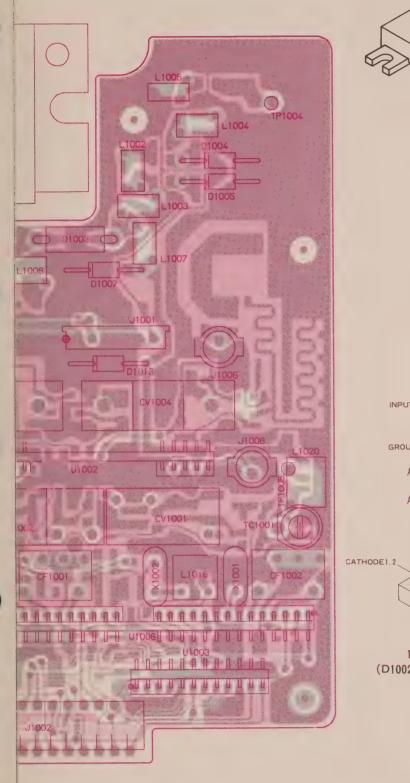
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C 1113 K22170202 CHIP CAP. GRM40CK010C50PT 1pF 50V CK C 1116 K40129067 AL. ELECTRO. CAP. RE3-16V102M 1000uF 16V C 1117 K22170202 CHIP CAP. GRM40CK010C50PT 1pF 50V CK C 1119 K22174235 CHIP CAP. GRM39CH101J50PT 100pF 50V CH C 1120 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B C 1121 K22174235 CHIP CAP. GRM39CH101J50PT 100pF 50V CH C 1122 K70127106 TANTALUM CAP. DN1C100M1S 10uF 16V C 1123 K22170209 CHIP CAP. GRM40CH080D50PT 8pF 50V CH
C 1116 K40129067 AL. ELECTRO. CAP. RE3-16V102M 1000uF 16V C 1117 K22170202 CHIP CAP. GRM40CK010C50PT 1pF 50V CK C 1119 K22174235 CHIP CAP. GRM39CH101J50PT 100pF 50V CH C 1120 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B C 1121 K22174235 CHIP CAP. GRM39CH101J50PT 100pF 50V CH C 1122 K70127106 TANTALUM CAP. DN1C100M1S 10uF 16V C 1123 K22170209 CHIP CAP. GRM40CH080D50PT 8pF 50V CH
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C 1119 K22174235 CHIP CAP. GRM39CH101J50PT 100pF 50V CH C 1120 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B C 1121 K22174235 CHIP CAP. GRM39CH101J50PT 100pF 50V CH C 1122 K70127106 TANTALUM CAP. DN1C100M1S 10uF 16V C 1123 K22170209 CHIP CAP. GRM40CH080D50PT 8pF 50V CH
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C 1121 K22174235 CHIP CAP. GRM39CH101J50PT 100pF 50V CH C 1122 K70127106 TANTALUM CAP. DN1C100M1S 10uF 16V C 1123 K22170209 CHIP CAP. GRM40CH080D50PT 8pF 50V CH C 1126 K46120010 AL. ELECTRO. CAP. RC2-16V470M-T34 47uF 16V C 1127 K22170805 CHIP CAP. GRM40B102M50PT 0 001uF 50V B
C 1122 K70127106 TANTALOM CAP. DIVICTOUMIS 10UF 16V C 1123 K22170209 CHIP CAP. GRM40CH080D50PT 8pF 50V CH C 1126 K46120010 AL. ELECTRO. CAP. RC2-16V470M-T34 47uF 16V C 1127 K22170805 CHIP CAP. GRM40B102M50PT 0 001uF 50V B
C 1125 K22170205 CHIT CAL.  C 1126 K46120010 AL. ELECTRO. CAP. RC2-16V470M-T34 47uF 16V  C 1127 K22170805 CHIP CAP. GRM40B102M50PT 0 001uF 50V B
C 1127 K22170805 CHIP CAP. GRM40B102M50PT 0 001uF 50V B
Cara indexious sint sint division division to the contract of
C 1128 K22140811 CHIP CAP. GRM40B104M25PT 0.1uF 25V B
C 1129 K46170030 AL. ELECTRO. CAP. 50V010M4X7TR2 1uF 50V
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C 1133 K22170235 CHIP CAP. GRM40CH101J50PT 100pF 50V CH
C 1134 K22170805 CHIP CAP. GRM40B102M50PT 0.001uF 50V B C 1135 K22170235 CHIP CAP. GRM40CH101J50PT 100pF 50V CH
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C 1136 K46170030 AL. ELECTRO. CAP. 50V010M4X7TR2 1uF 50V C 1137 K22170805 CHIP CAP. GRM40B102M50PT 0. 001uF 50V B C 1138 K22170805 CHIP CAP. GRM40B102M50PT 0. 001uF 50V B C 1139 K22140811 CHIP CAP. GRM40B104M25PT 0. 1uF 25V B C 1140 K22140811 CHIP CAP. GRM40B104M25PT 0. 1uF 25V B C 1141 K22170235 CHIP CAP. GRM40CH101J50PT 100pF 50V CH C 1143 K40129066 AL. ELECTRO. CAP. RE3-16V471M 470uF 16V
C 1145 K40129066 AL. ELECTRO. CAP. RE3-16V471M 470uF 16V
C 1145 K40129066 AL. ELECTRO. CAP. RE3-16V471M 470uF 16V C 1146 K22170805 CHIP CAP. GRM40B102M50PT 0. 001uF 50V B C 1148 K22174809 CHIP CAP. GRM39B102M50PT 0. 001uF 50V B C 1149 K22174204 CHIP CAP. GRM39CJ030C50PT 3pF 50V CJ C 1150 K22174207 CHIP CAP. GRM39CH060D50PT 6pF 50V CH
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C 1152 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B C 1153 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B
C 1153 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B C 1154 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B
C 1154 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B C 1155 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B
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C 1157 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B
C 1158 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B
C 1160 K78120009 TANTALUM CHIP CAP. TESVA1C105M1-8R 1uF 16V
C 1163 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B C 1164 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B
C 1164 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B C 1165 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B
C 1166 K22174235 CHIP CAP. GRM39CH101J50PT 100pF 50V CH
C 1167 K22170203 CHIP CAP. GRM40CK020C50PT 2pF 50V CK
C 1169 K22174201 CHIP CAP. GRM39CKOR5C50PT 0.5pF 50V CK
C 1170 K22174235 CHIP CAP. GRM39CH101J50PT 100pF 50V CH
C 1171 K46120007 AL ELECTRO. CAP. 16V101M6X7TR2 100uF 16V
C 1172 K22170805 CHIP CAP. GRM40B102M50PT 0.001uF 50V B C 1173 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B
C 1173 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B C 1174 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B
C 1174 K22174809 CHIP CAP. GRM39B102M50PT 0.001uF 50V B C 1176 K22170204 CHIP CAP. GRM40CJ030C50PT 3pF 50V CJ
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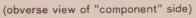
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CF1001 CF1002	H3900400 H3900400	CERAMIC FILTER CERAMIC FILTER	CFWM455E CFWM455E				
CV1001 CV1002 CV1003 CV1004	L4020082 L4020081 H3900402 H3900402	HELICAL RESONATOR HELICAL RESONATOR CERAMIC FILTER CERAMIC FILTER	HF-62H14 440M R-F5 HF-63H21 440M R-F5 6DFB-1270L-11 6DFB-1270L-11				
D 1001 D 1002 D 1003 D 1004 D 1005 D 1006 D 1007 D 1008 D 1009 D 1010 D 1011 D 1012 D 1013	Q9000534 G2070086 G2090425 G2090118 G2090118 G2015550 G2090337 G2070118 G2070102 G2070102 G2070003 G2090337	SURGE ABSORBER DIODE	P6KE18 1SS301 TE85R UM9415 1SS97 1SS97 1S1555 MI308 HSU277 HSU277 1T362-T8 HZM11B-TR 1SS226 TE85R MI308				

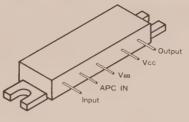
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FB1501	L9190055	FERRITE BEADS	B-20L-48B				
J 1001 J 1002 J 1003 J 1004 J 1005 J 1006 J 1007 J 1008 J 1009	P1090672 P1090671 P1090560 P0090612 P1090672 P1090210 P1090210 P1090210 P1090210	CONNECTOR	9110S-06 5533-26APB 5533-14APB SB20-05WS 9110S-06 TMP-J01X-V6 TMP-J01X-V6 TMP-J01X-V6				
L 1002 L 1003 L 1004 L 1005 L 1006 L 1007 L 1008 L 1009 L 1010 L 1011 L 1012 L 1014 L 1015 L 1016 L 1017 L 1018 L 1019 L 1020 L 1021 L 1022	L0020900 L1690002	COIL COIL COIL COIL COIL COIL COIL COIL	1.5T3.5D0.6UEW R 1.5T3.5D0.6UEW R 2.5T3.5D0.6UEW R 1.5T3.5D0.6UEW R 1.0T3.0D0.5UEW R 1.5T3.5D0.6UEW R 8.5T3.0D0.5UEW R LQN2A47NM 1.5T3.0D0.5UEW R LQN2A47NM LQN2A18NM LQN2A18NM LQN2A18NM LQN2A22NM 7U LQH3NR68M92M00- LQH3NR68M92M00- LQH3N1R0M02M00- 2.5T3.5D0.8ACW R LQN2A22NM 32CS 380NB-R22M=P	0. 047uH 0. 047uH 0. 018u 0. 018u 0. 022uH 0. 68uH 1. 0u 0. 022uH 0. 22uH			
Q 1001 Q 1002 Q 1003 Q 1004 Q 1005 Q 1006 Q 1007 Q 1008 Q 1009 Q 1010 Q 1011 Q 1011 Q 1012 Q 1013 Q 1014 Q 1015 Q 1016 Q 1017 Q 1018 Q 1019	G3333567 G1091122 G1091088 G3090050 G3333577 G3342267B G3070034 G4070001 G3815777 G3070025 G3326207B G1090893 G1090893 G3070034 G3328737Y	TRANSISTOR TRANSISTOR IC IC IC TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR IC IC IC TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	2SB1134R 2SC3356-T2B 2SC3356-T2B M57788MR M67732 2SC2407(1) 2SC3357-T2 2SC4226-T2B R22 DTC124EK T97 DTC124EK T97 SGM2006M-T8 2SK1577 IMZ1 T108 2SC2620QBTR TC4S66F TE85R DTC124EK T97 2SC2873-Y TE12R DTC124EK T97				

REF. YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV TOL.	VERS.
· · · · · · · · · · · · · · · · · · ·	IC TRANSISTOR FET TRANSISTOR TRANSISTOR IC IC TRANSISTOR IC TRANSISTOR TC TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	UPC7808H 2SC3356-T2B SGM2006M-T8 2SC2620QBTR 2SC2620QBTR TDA2003 UPD4066BG 2SC1623-T2BL6 UPC7805H 2SC4226-T2B R22 DTC114EK T96 DTC114EK T96			
R 1035 J24205104 R 1036 J24185103 R 1037 J24205560 R 1038 J24205102 R 1039 J24205223 R 1040 J24205223 R 1041 J24205221 R 1042 J24185101 R 1043 J24185471 R 1044 J24185471 R 1045 J24185103	CHIP RES.	RMC1/16 473JATP RMC1/10T 471J RMC1/10T 470J RMC1/10T 100J RMC1/10T 100J RMC1/10T 103J RMC1/10T 103J RMC1/10T 150J RMC1/10T 150J RMC1/10T 150J RMC1/10T 472J RMC1/10T 470J RMC1/10T 470J RMC1/10T 470J RMC1/10T 470J RMC1/10T 100J RMC1/10T 101J RMC1/16 683JATP RMC1/10T 101J RMC1/16 102JATP RMC1/10T 104J RMC1/10T 104J RMC1/10T 103J RMC1/10T 103J RMC1/10T 100J RMC1/10T 103J RMC1/10T 100J RMC1/10T 103J RMC1/10T 1	47K 470 47 22K 10 10K 10K 4.7K 15 1K 4.7K 47 47 150 10 47 68K 100 470 1K 47 100K 22K 10K 68 10 10 4.7K 10K 10K 10K 10K 10K 10K 10K 10	1/16W 1/10W	

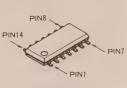
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VR1001 VR1002	J51778473 J51778473	POT.	RHO3AYAS4X RHO3AYAS4X	47K 47K			
X 1001 X 1002	H0102983 H0102976	XTAL XTAL		22.045MHZ 19.2816MHZ			
	R3129530 R0137310 R0137320 R0139360 R0139830	XTAL HOLDER (2 pcs) HEATSINK PLATE SHIELD CASE HEATSINK PLATE LEAF SPRING					



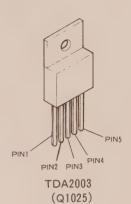


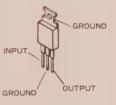


M57788MR (Q1004)

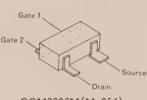


μPD4066BG (Q1026)

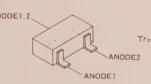




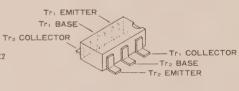
μPC7805H (Q1024) μPC7808H (Q1016)



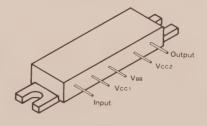
SGM2006M(M-254) (Q1011,Q1022)



1SS301(B3) (D1002, D1015, D1016)



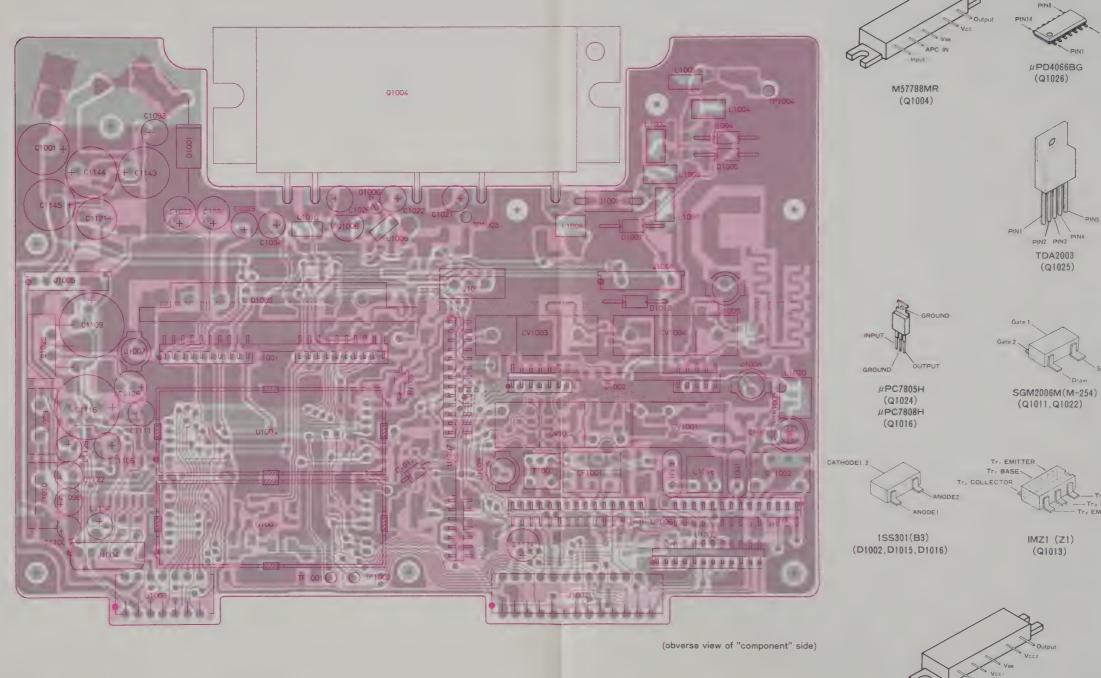
IMZ1 (Z1) (Q1013)



M67732 (Q1005)

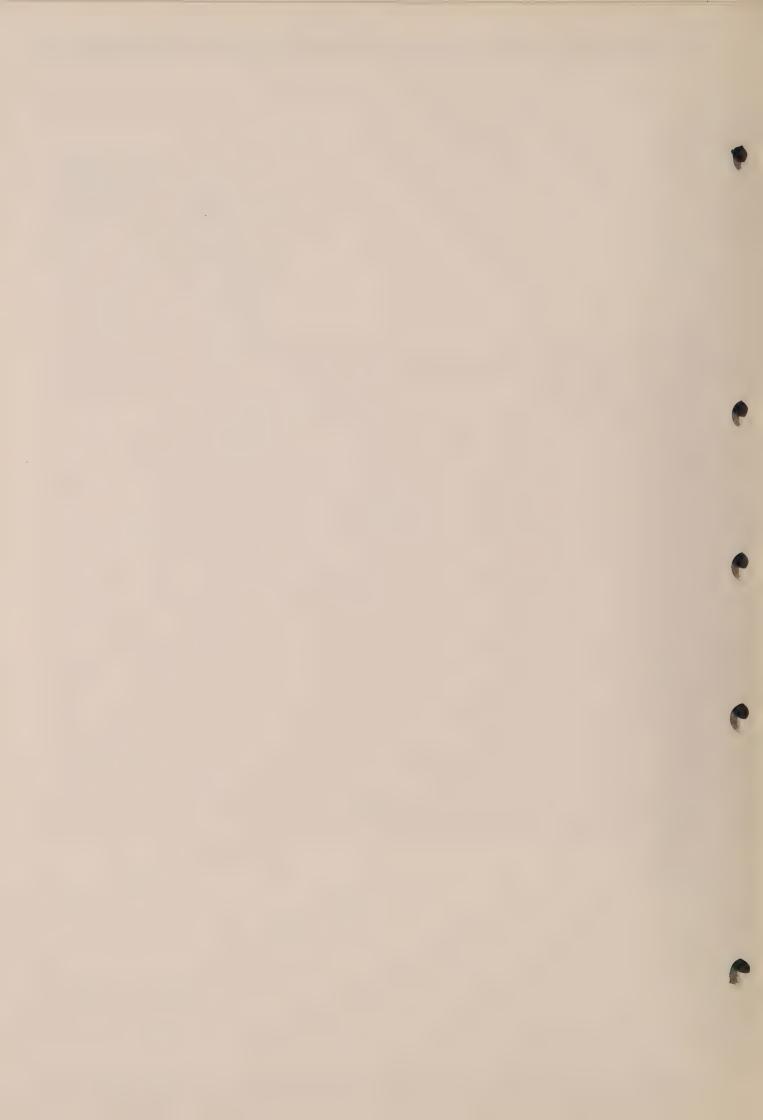
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TS1001	Q9000553	THERMAL SEITCH	OHD1-60M					
VR1001 VR1002	J51778473 J51778473	POT.	RHO3AYAS4X RHO3AYAS4X	47K 47K				
X 1001 X 1002	H0102983 H0102976	XTAL XTAL		22.045MHZ 19.2816MHZ				
	R3129530 R0137310 R0137320 R0139360 R0139830	XTAL HOLDER (2 pcs) HEATSINK PLATE SHIELD CASE HEATSINK PLATE LEAF SPRING						

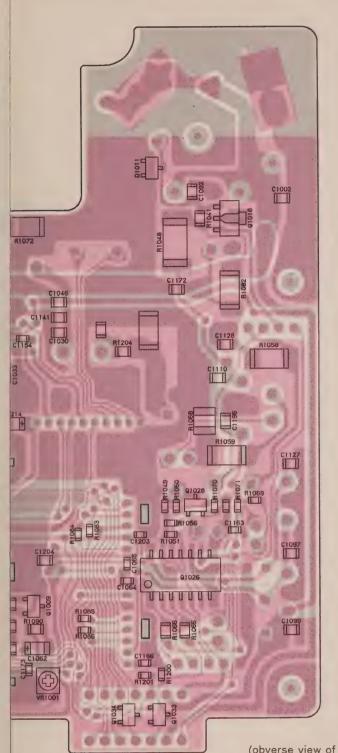
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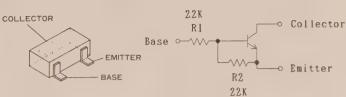


3-29

M67732 (Q1005)

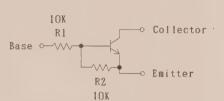






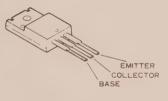
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(Q1033, Q1034)

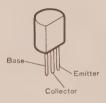


DTC124EK CIRCUIT DIAGRAM

DTC114EK CIRCUIT DIAGRAM

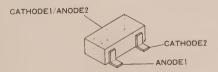


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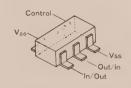


2SC2407 (Q1006)

(obverse view of "chip-only" side)



1SS226(C3) (D1012, D1014)

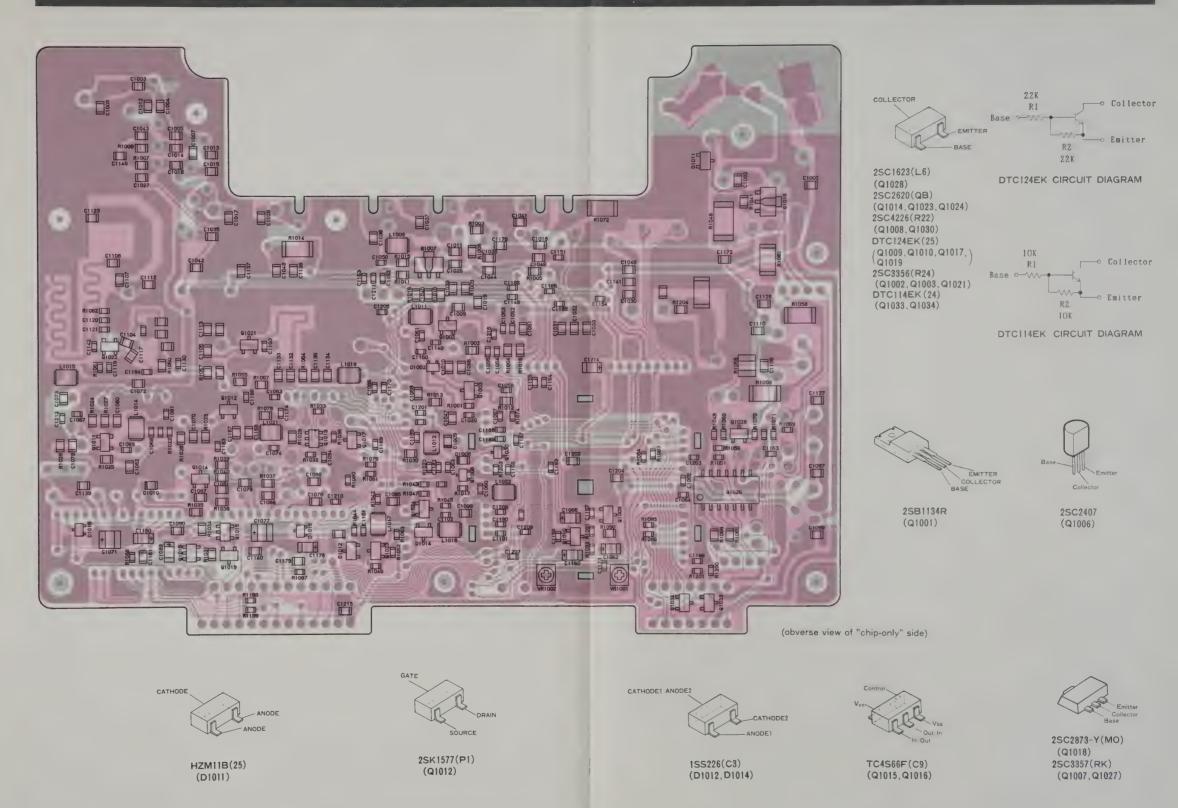


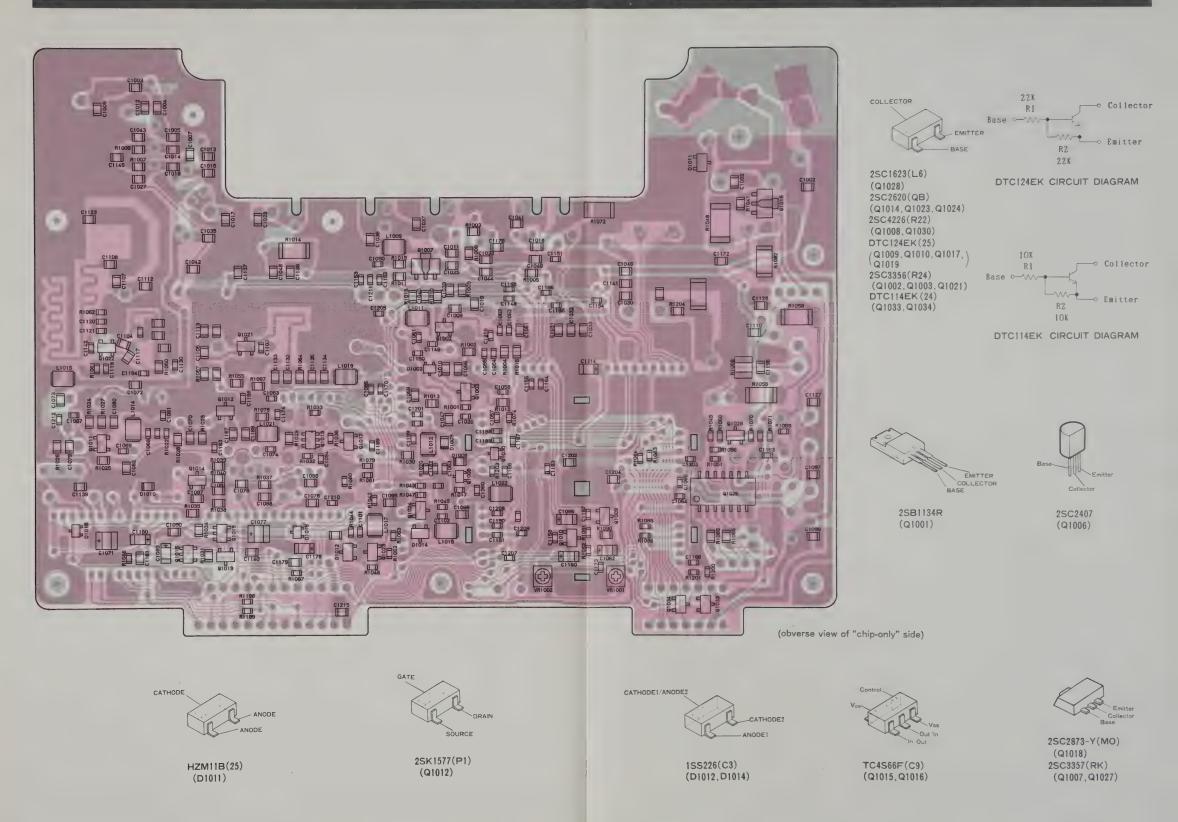
TC4S66F(C9) (Q1015,Q1016)

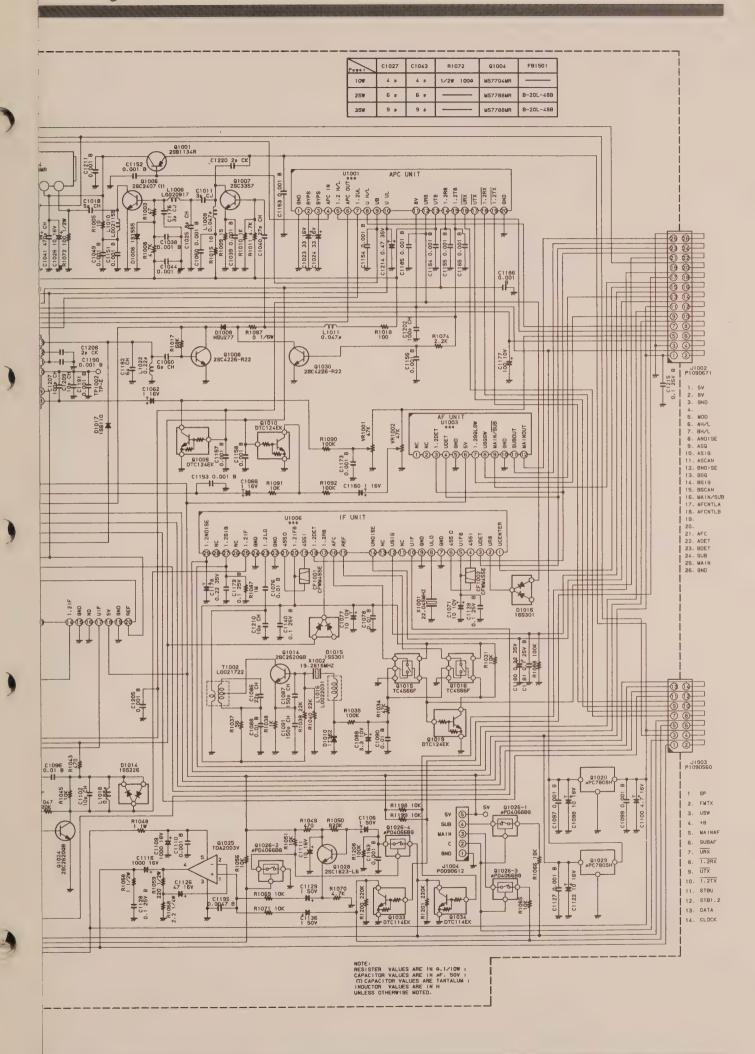


2SC2873-Y(MO) (Q1018) 2SC3357(RK) (Q1007,Q1027)

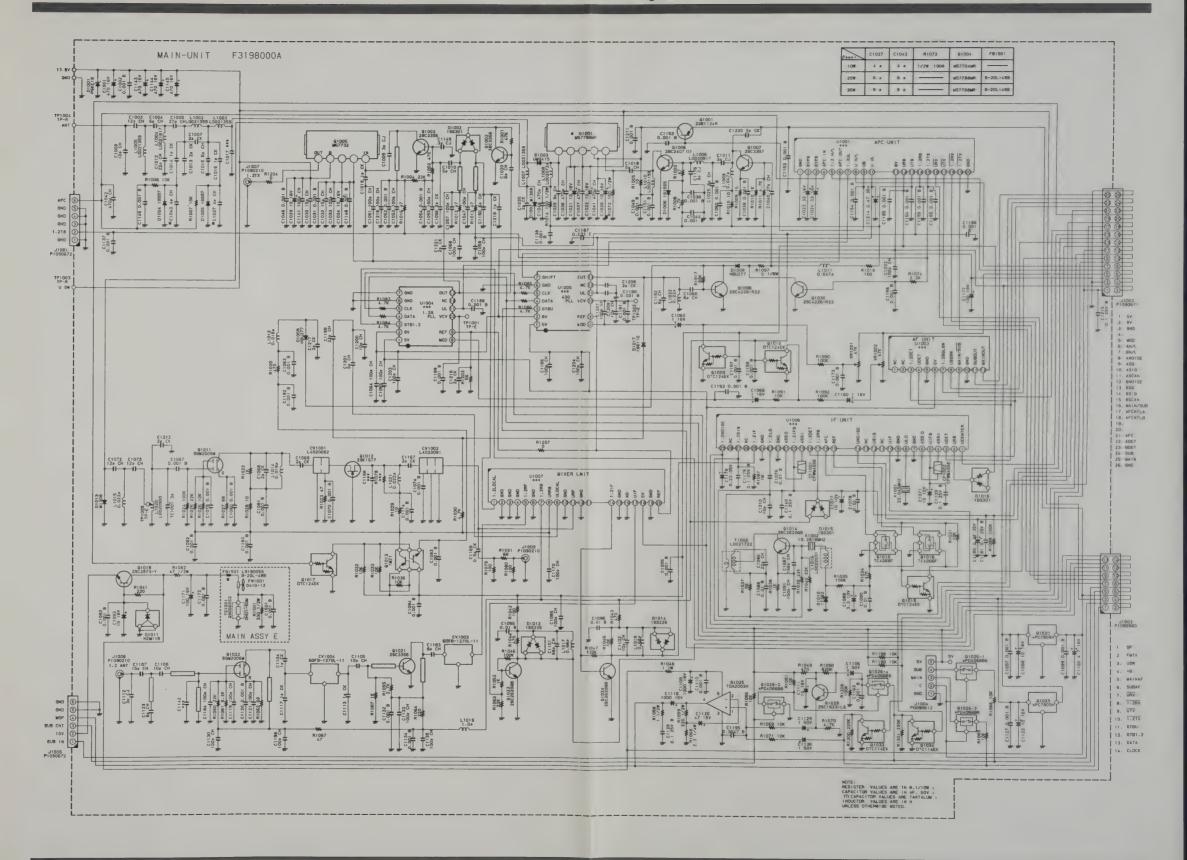


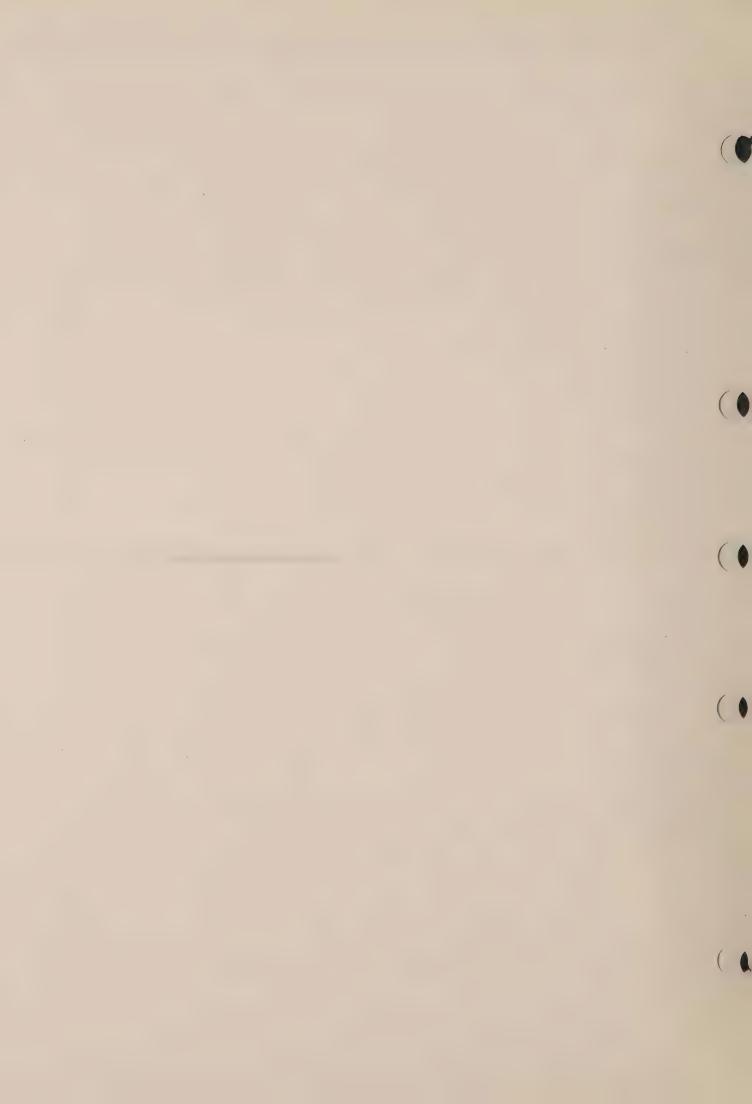










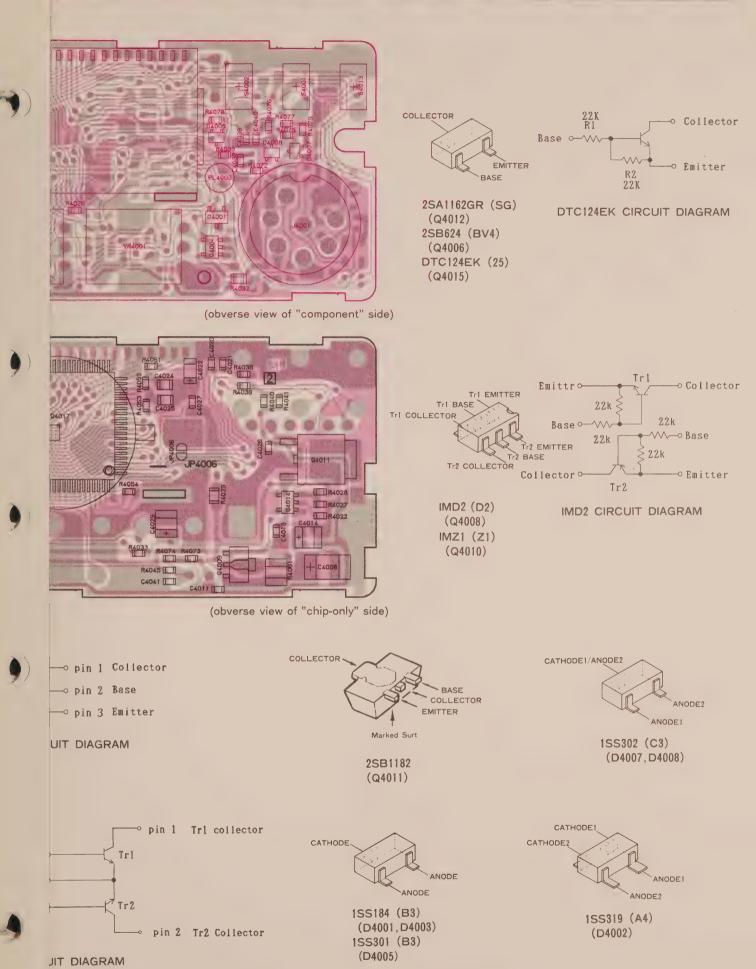


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	**	*** CNTL UNIT ***		***************************************			
	CS0976005 CS0976006 CS0976007 CS0976008 CS0976010 CS0976011 CS0976012 CS0976013 CS0976014 CS0976015	P. C. B. W COMP.					TYP A2 TYP B1 TYP B2 TYP C1 TYP C2 TYP D1 TYP D2 TYP H1 TYP H2 TYP A1 DST USA
	F3172101C	P.C.B. W/O COMP.					
BT4001	Q9000552	LITHIUM BATTERY	CR2016-TS1				
C 4014 C 4015 C 4016 C 4017 C 4018	K22174223 K22174809 K78120009 K22144803 K22144803 K78120015 K22140811 K22140811 K22174809 K78120002 K78080019 K22174809 K22174809 K22174809 K22174809 K22174809 K22174809 K22174809 K22174809 K22174235 K22174235 K22174235 K22174235	CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. TANTALUM CHIP CAP.	GRM39B103K25PT TEMSVA1C225M-8R GRM40B104M25PT GRM40B104M25PT GRM39B102M50PT	0. 01uF 0. 1uF 10uF 0. 001uF 10uF 10uF 10uF 10uF 10uF 10uF 0. 001uF 0. 001uF 0. 01uF 0. 001uF	16V 50V 50V 6. 3V 25V 50V 50V 16V 25V 25V 25V 25V 50V 50V 50V 50V 50V 50V 50V	B B B B B B B B B B B B B B B B B B B	

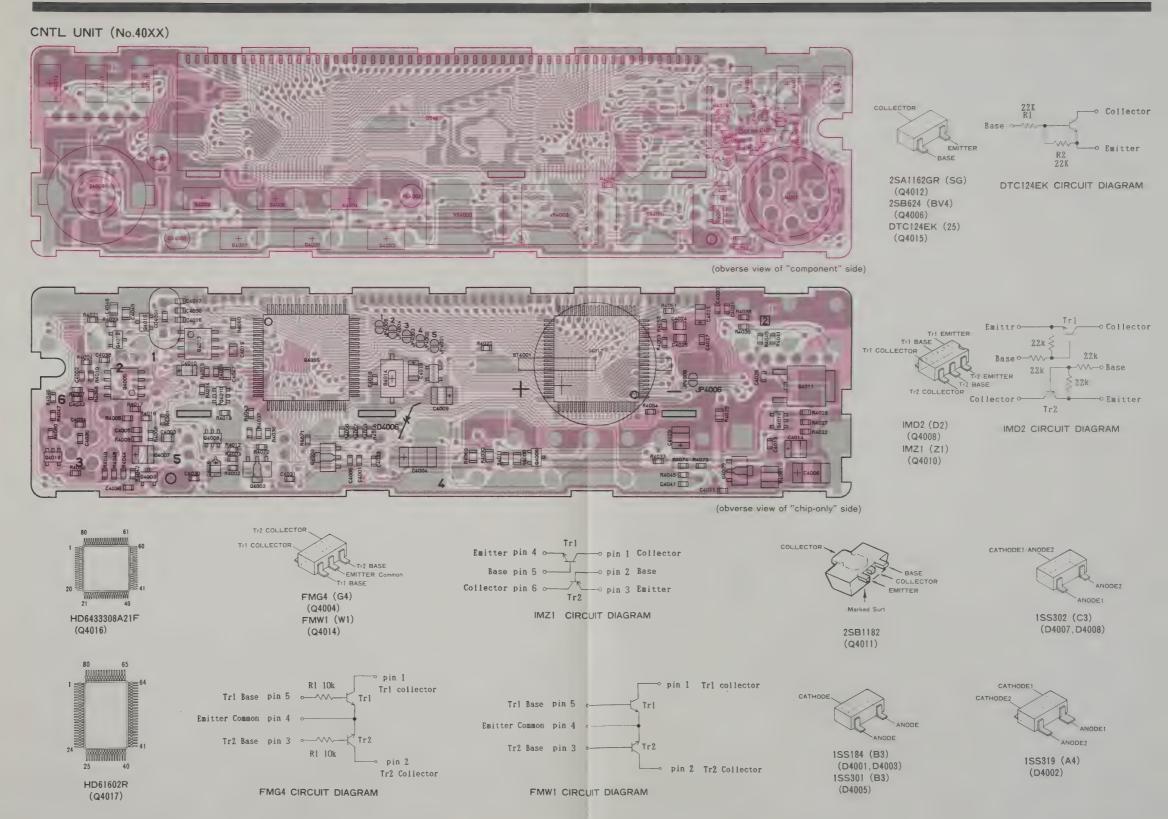
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C 4049 C 4050	K22140811 K22144803	CHIP CAP.	GRM40B104M25PT GRM39B103K25PT	0. 1uF 0. 01uF	25V 25V	B B	
CO4001	Н7900620	CERAMIC OSC	CSA9.83MT				
CS4001	G9090056	CDS P2137-01	P2137-01				
D 4001 D 4002 D 4003 D 4005 D 4007 D 4008	G2070009 G2070080 G2070009 G2070086 G2070088 G2070088	DIODE DIODE DIODE DIODE DIODE	1SS184 TE85R 1SS319 TE85R 1SS184 TE85R 1SS301 TE85R 1SS302 TE85R 1SS302 TE85R				
DS4001	G6090088	LCD	FTD-8E51ABK				
J 4001	P0090742	CONNECTOR	FM214-8SMPT-1				
JP4006	JP3						
PL4001 PL4002 PL4003	Q1000065 Q1000065 Q1000065	LAMP LAMP LAMP			9V 9V 9V		
Q 4002 Q 4003 Q 4004 Q 4005 Q 4006 Q 4008 Q 4010 Q 4011 Q 4011 Q 4012 Q 4013 Q 4014 Q 4015 Q 4016 Q 4018	G1090922 G1091144 G3070061 G1090589 G3206247D G3070026 G1090887 G3070063 G3111627G G1091145 G3070009 G3070009 G3070034 G1091301 G109135 G1090893	IC IC TRANSISTOR IC TRANSISTOR TRANSISTOR IC TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR IC TRANSISTOR IC TRANSISTOR IC IC IC IC	RH5VA45AA-T2 NJU7201U50 TE2 FMG4 T148 NJM2904M 2SB624-T2B BV4 IMD2 T108 NJM78L05UA IMZ1 T108 2SB1182-TLQ 2SA1162GR TE85R M51953AFP-32A FMW1 T98 DTC124EK T97 HD6433308R28F HD61602RH TC4S66F TE85R				
R 4001 R 4002 R 4003 R 4004 R 4005 R 4006 R 4008 R 4010 R 4011 R 4012 R 4013 R 4014 R 4016 R 4017 R 4018	J24185394 J24205332 J24185472 J24185104 J24185104 J24185000	CHIP RES.	RMC1/16 103JATP RMC1/16 183JATP RMC1/16 103JATP RMC1/16 122JATP RMC1/16 103JATP RMC1/16 000JATP RMC1/16 822JATP RMC1/16 394JATP RMC1/16 472JATP RMC1/16 104JATP RMC1/16 104JATP RMC1/16 472JATP RMC1/16 472JATP RMC1/16 472JATP RMC1/16 104JATP RMC1/16 104JATP RMC1/16 104JATP	10K 18K 10K 1. 2K 10K 3. 3K 0 8. 2K 390K 3. 3K 4. 7K 100K 100K 4. 7K 0	1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16	W W W W W W W W W W	

REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV TOL.	VERS.
R 4021		CHIP RES.	RMC1/16 473JATP			
R 4022		CHIP RES.		1607	1/16W	
R 4023	J24185104	CHIP RES.	RMC1/16 104JATP	100K	1/16W	
R 4025	J24185472	CHIP RES.	RMC1/16 47ZJATP	4.7K	1/16W	
R 4026	J24185224	CHIP RES.	RMC1/10 ZZ4JAIP	470	1/10W	
R 4027	124100471	CHIP DEC	DMC1/10 4/1JAIP	470	1/10W	
R 4028 R 4029	124100104	CHIP RES. CHIP RES. CHIP RES. CHIP RES. CHIP RES.	DMC1/10 1U2JAIF	11/	1/10W	
R 4029	124205220	CHIP RES.	DMC1/101 220J	22 22	1/10W	
R 4030	124105220	CHID DEC	DMC1/101 220J	44 1 M	1/10W 1/16W	
R 4031	124103103	CHIP DEC	DMC1/10 1000A1F	22	1/10W 1/10W	
R 4032	124105220	CHIP RES.	PMC1/101 2203	10V	1/10W	
R 4034	124185223	CHIP RES	RMC1/16 1033X11	22K	1/16W	
R 4035	J24185103	CHIP RES	RMC1/16 103.JATP	10K	1/16W	
R 4036	J24185393	CHIP RES.	RMC1/16 393.JATP	39K	1/16W	
D 4007	TO 110 POOO	AILLD DDA	DVG1 /10 000 TIMD	0.017	4 /4 011	
R 4038	J24185103	CHIP RES.	RMC1/16 103JATP	10K	1/16W	
R 4039	J24185103	CHIP RES.	RMC1/16 103JATP	10K	1/16W	
R 4040	J24185104	CHIP RES.	RMC1/16 104JATP	100K	1/16W	
R 4041	J24185104	CHIP RES.	RMC1/16 104JATP	100K	1/16W	
R 4042	J24185223	CHIP RES.	RMC1/16 223JATP	22K	1/16W	
R 4043	J24185224	CHIP RES.	RMC1/16 224JATP	220K	1/16W	
R 4044	J24185223	CHIP RES.	RMC1/16 223JATP	22K	1/16W	
R 4045	J24185225	CHIP RES.	RMC1/16 225JATP	2.2M	1/16W	
R 4046	J24185102	CHIP RES.	RMC1/16 102JATP	1K	1/16W	
R 4047	J24185102	CHIP RES.	RMC1/16 102JATP	1K	1/16W	
R 4048	J24185102	CHIP RES.	RMC1/16 102JATP	1 K	1/16W	
R 4049	J24185102	CHIP RES. CHIP RES. CHIP RES. CHIP RES. CHIP RES. CHIP RES.	RMC1/16 102JATP	1K	1/16W	
R 4050	J24185105	CHIP RES.	RMC1/16 105JATP	1M	1/16W	
R 4051	J44100444	CHIP RES.	RMC1/10 ZZZJAIP	4. 4N	1/10M	
	J24185103		RMC1/16 103JATP		1/16W	
	J24185103		RMC1/16 103JATP			
	J24185334		RMC1/16 334JATP	330K	1/16W	
	J24185104		RMC1/16 104JATP	100K	1/16W	
	J24185822		RMC1/16 822JATP	8. 2K	1/16W	
R 4057 R 4058	J24185392 J24185222		RMC1/16 392JATP RMC1/16 222JATP	3.9K 2.2K	1/16W 1/16W	
R 4059	J24185102		RMC1/16 102JATP		1/16W	
R 4060	J24185102 J24185104		RMC1/16 104JATP		1/16W	
R 4061	J24165104 J24245101		RMC1/4 101JATP		1/10W 1/4W	
R 4062	J24245101 J24185000		RMC1/4 TOTSATT	0	1/16W	
R 4063	J24185000		RMC1/16 000JATP	0	1/16W	
R 4064	J24185000	CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 4065	J24185000	CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 4066	J24185000	CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 4067	J24185472		RMC1/16 472JATP		1/16W	
R 4068	J24185102		RMC1/16 102JATP	1K	1/16W	
R 4069			RMC1/10T 101J	100	1/10W	
R 4070	J24185473	CHIP RES.	RMC1/16 473JATP	47K	1/16W	
R 4071	J24185473	CHIP RES.	RMC1/16 473JATP	47K	1/16W	
R 4072	J24185183	CHIP RES.	RMC1/16 183JATP		1/16W	
R 4073	J24185225	CHIP RES.	RMC1/16 225JATP		1/16W	
R 4074	J24185225	CHIP RES.	RMC1/16 225JATP	2.2M	1/16W	
R 4075	J24185222		RMC1/16 222JATP	2. 2K	1/16W	
R 4076	J24185222		RMC1/16 222JATP	2.2K	1/16W	
R 4077	J24185102	CHIP RES.	RMCI/16 102JATP	1K	1/16W	
R 4078	J24185102	CHIP RES.	RMC1/16 102JATP	1K	1/16W	

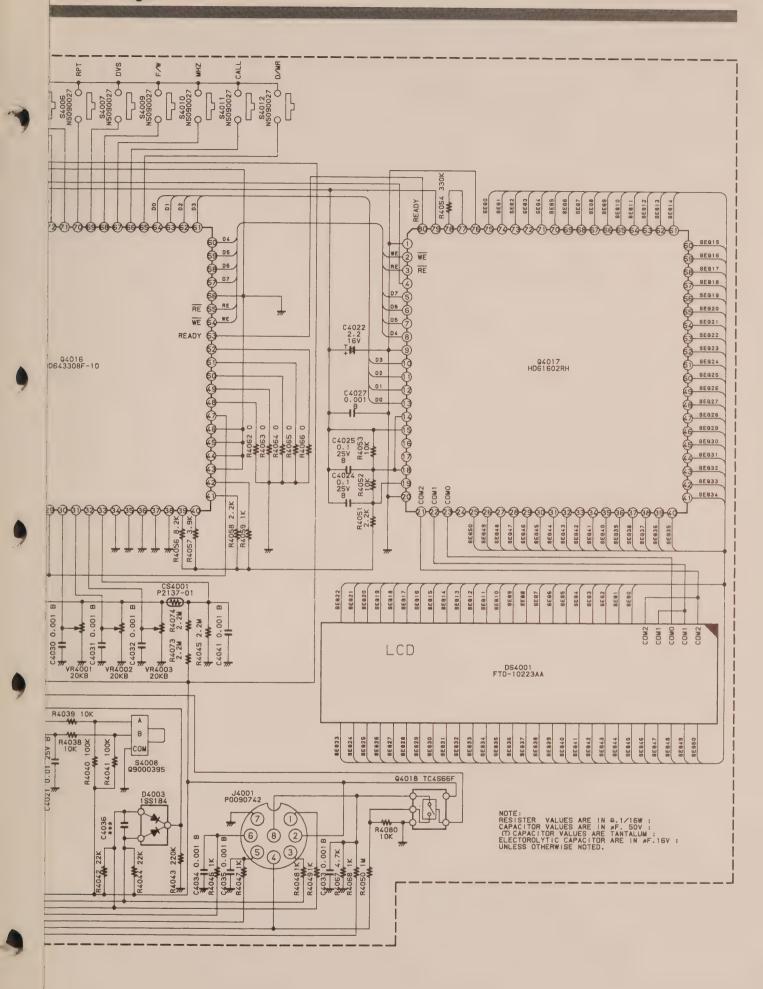
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S 4001 S 4002 S 4003 S 4004 S 4005 S 4006 S 4007 S 4008 S 4010 S 4011 S 4011 S 4012 S 4013 S 4014	N5090027 N5090027 N5090027 N5090027 N5090027 N5090027 Q9000395 N5090027 N5090027 N5090027 N5090027 N5090027 N5090027 N5090027	TACT SWITCH	SKHLAB		
VR4001 VR4002 VR4003	J60800171 J60800143 J60800143	POT. POT. POT.	K091C0G05 RK09K1130 RK09K1130	20KB 20KB 20KB	
	R0138710 R7118750 R7138420 R3136520 R7140060 S2000033	METAL HOLDER SPONGE RUBBER SHEET RUBBER CONDUCTOR LAMP GUIDE REFLECTOR			

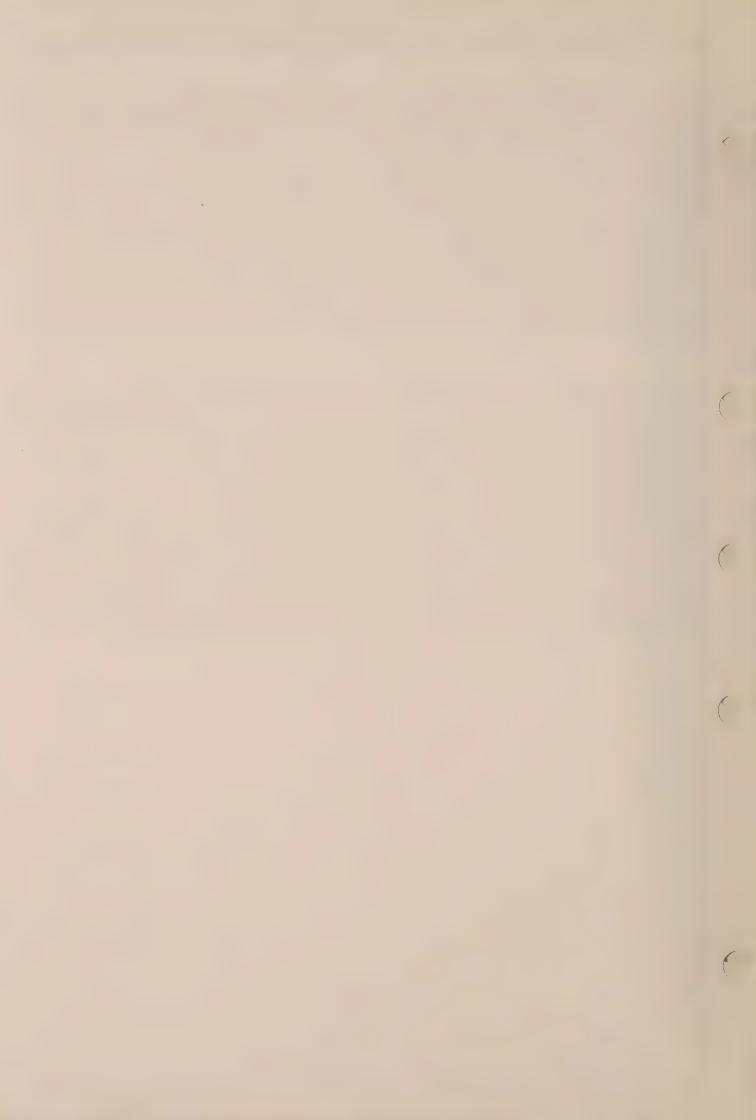


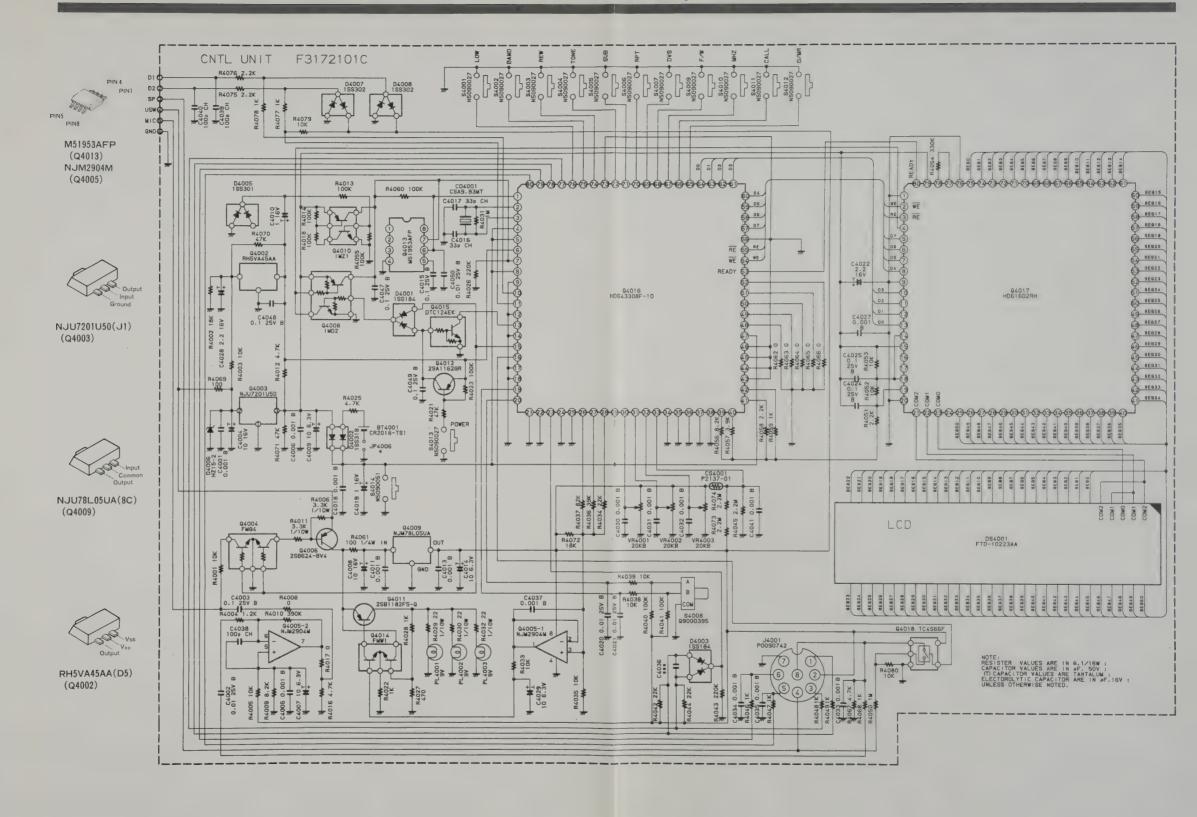
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S 4001 S 4002 S 4003 S 4004 S 4005 S 4006 S 4007 S 4008 S 4010 S 4011 S 4011 S 4012 S 4013 S 4014	N5090027 N5090027 N5090027 N5090027 N5090027 N5090027 N5090027 Q9000395 N5090027 N5090027 N5090027 N5090027 N5090027 N5090027	TACT SWITCH	SKHLAB SKHLAB SKHLAB SKHLAB SKHLAB SKHLAB SKHLAB EVQ-WWNF1524B SKHLAB SKHLAB SKHLAB SKHLAB SKHLAB			
VR4001 VR4002 VR4003	J60800171 J60800143 J60800143	POT. POT. POT.	K091C0G05 RK09K1130 RK09K1130	20KB 20KB 20KB		
	R0138710 R7118750 R7138420 R3136520 R7140060 S2000033	METAL HOLDER SPONGE RUBBER SHEET RUBBER CONDUCTOR LAMP GUIDE REFLECTOR				

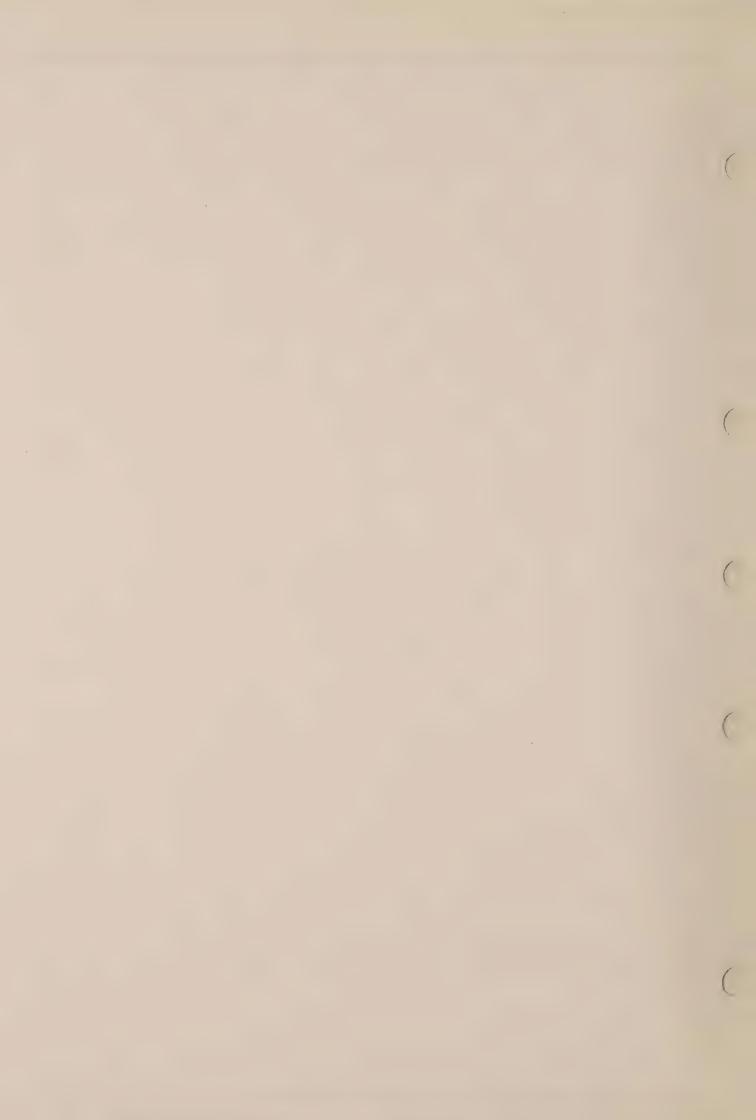












# Interface Unit Parts List

REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV	TOL.	VERS.
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	CA0483006 CA0483007 CA0483008 CA0483009 CA0483010 CA0483011 CA0483012 CA0483013	P. C. B. W COMP.			,		TYP A1 TYP A2 TYP B1 TYP B2 TYP C1 TYP C2 TYP D1 TYP D2 TYP H1 TYP H2
	F3171100B	P.C.B. W/O COMP.					
C 5001 C 5003 C 5004 C 5005 C 5006 C 5007 C 5008 C 5009 C 5010 C 5011 C 5012 C 5013 C 5014 C 5015 C 5016 C 5017 C 5018 C 5019 C 5020 C 5021 C 5022 C 5023 C 5024 C 5025 C 5026 C 5027 C 5028 C 5029 C 5030 C 5031 C 5032 C 5033 C 5034 C 5035 C 5035 C 5036 C 5037 C 5038 C 5039 C 5030 C 5031 C 5032 C 5033 C 5034 C 5033 C 5034 C 5035 C 5034 C 5035 C 5036 C 5037 C 5038 C 5039 C 5030 C 5031 C 5032 C 5033 C 5033 C 5034 C 5033 C 5034 C 5033 C 5034 C 5035 C 5036 C 5037 C 5038 C 5039 C 5030 C 5031 C 5032 C 5033 C 5034 C 5034 C 5034 C 5035 C 5034 C 5044 C	K78120016 K78120016 K22174809 K22141809 K22144802 K22144807 K22144809 K22144809 K22144809 K22144809 K22144802 K22144802 K22174809 K78140013 K22144802 K22174809 K22174809 K22174809 K22144802 K22174809 K22144802 K22174809 K22144809	CHIP CAP. TANTALUM CHIP CAP. TANTALUM CHIP CAP. CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. TANTALUM CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. TANTALUM CHIP CAP. TANTALUM CHIP CAP.	TESVA1C105M1-8R TESVA1C105M1-8R GRM39B102M50PT GRM39B102M50PT TESVA1C105M1-8R TESVA1C105M1-8R GRM40B223M25PT GRM39B103K25PT TEMSVB20J106M-8R GRM39B102M50PT TESVC1C106M12R GRM39B102M50PT TESVC1C106M12R GRM39B102M50PT TEMSVB21C475M-8R TEMSVB21C475M-8R GRM39B102M50PT GRM42-6B104M25PT GRM39CH101J50PT GRM39CH101J50PT GRM40B104M25PT GRM40B104M25PT GRM40B104M25PT GRM40B104M25PT GRM42-6B104M25PT GRM42-6B104M25PT GRM39B103M25PT GRM39B102M50PT GRM39B102M50PT GRM39B102M50PT GRM39B102M50PT GRM39B102M50PT GRM39B102M50PT GRM39B103M25PT GRM42-6B104M25PT	0. 1uF 1uF 0. 001uF 0. 001uF 0. 001uF 1uF 0. 022uF 0. 01uF 10uF 0. 001uF 10uF 0. 001uF 4. 7uF 0. 001uF 0. 1uF 100pF 0. 01uF 0. 1uF 0. 01uF 0. 001uF 0. 001uF 0. 001uF 0. 001uF 0. 001uF	25V 25V 16V 16V 50V 16V 25V 25V 6. 3V 50V 16V 50V 25V 25V 25V 25V 25V 25V 25V 25V 25V 25	B B B B B B B B B B B B B B B B B B B	

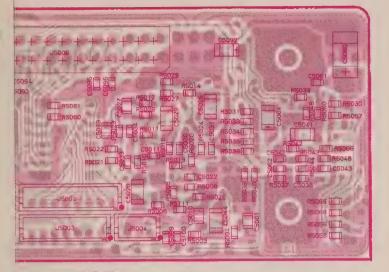
REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV	TOL.	VERS.
C 5044 C 5045 C 5046 C 5047 C 5048 C 5050 C 5051 C 5052 C 5060 C 5061 C 5062 C 5063 C 5064 C 5066 C 5092 C 5093 C 5094 C 5095 C 5095 C 5097 C 5098 C 5099 C 5100 C 5101	K22141809 K22141809 K78120011 K22174809 K22174223 K22174223 K22174809 K22141809 K78120009 K78120011 K22174809 K22174809 K22174809 K78140013 K22174809 K78080017 K22174809	CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. TANTALUM CHIP CAP. TANTALUM CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. TANTALUM CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. TANTALUM CHIP CAP.	GRM42-6B104M25PT GRM42-6B104M25PT TESVC1C106M12R GRM39B102M50PT GRM39CH330J50PT GRM39CH330J50PT GRM39B102M50PT GRM42-6B104M25PT TESVA1C105M1-8R TESVC1C106M12R GRM39B102M50PT GRM39B102M50PT GRM39B102M50PT TEMSVA1E105M-8R GRM39B102M50PT TEMSVA0J475M-8R GRM39B102M50PT	0. 1uF 0. 1uF 10uF 0. 001uF 33pF 33pF 0. 001uF 0. 1uF 1uF 10uF 0. 001uF 0. 001uF 0. 001uF 4. 7uF 0. 001uF	25V 25V 16V 50V 50V 50V 25V 16V 50V 50V 50V 50V 50V 50V 50V 50V 50V 50	B B CH CH B B B B B B B B B B B B B B B	
C05001	H7900620	CERAMIC OSC	CSA9.83MT				
D 5001 D 5002 D 5003 D 5004 D 5005 D 5006 D 5007	G2070120 G2070120 G2070120 G2070120 G2070120 G2070003 G2070003	DIODE DIODE DIODE DIODE DIODE DIODE DIODE DIODE	IMP11 T110				
J 5002 J 5003 J 5004 J 5005 J 5006 J 5007	P0090650 P0090649 P0090648 P0090782 P0090772 P0090604	CONNECTOR CONNECTOR CONNECTOR CONNECTOR CONNECTOR CONNECTOR	B8B-ZR B7B-ZR B3B-ZR B12B-ZR 5532-26A 5532-14A				
Q 5002 Q 5005 Q 5006 Q 5007 Q 5008 Q 5010 Q 5015 Q 5016 Q 5017 Q 5018 Q 5019 Q 5020 Q 5023	G1090854 G1091136 G1091137 G1091033 G1091131 G3112137Y G3070047 G1090908 G1090893 G1090893 G3112137Y G3070047 G3113437	IC IC IC IC IC TRANSISTOR TRANSISTOR IC IC IC TC	M51523AL M37450M2-***FP UPD4028BG-T2 UPD4052BG-T2 M51951AML-301 2SA1213Y TE12R DTA114EK T97 NJM2902M NJM2902M TC4S66F TE85R TC4S66F TE85R 2SA1213Y TE12R DTA114EK T97 2SA1343-TA				

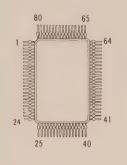
#### Interface Unit Parts List

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R 5001 J24185331 CHIP RES.	RMC1/16 331JATP RMC1/16 101JATP	330	1/16W 1/16W	
R 5002 J24185101 CHIP RES.	RMC1/16 101JATP	39K	1/16W 1/16W	
R 5003 J24185393 CHIP RES. R 5004 J24185393 CHIP RES.	RMC1/16 393JATP	39K		
R 5004 J24185393 CHIP RES. R 5005 J24185103 CHIP RES.	RMC1/16 103JATP			
R 5006 J24185104 CHIP RES.	RMC1/16 104.TATP	100K	1/16W	
R 5008 J24185472 CHIP RES.	RMC1/16 472JATP	4.7K	1/16W	
R 5010 J24185103 CHIP RES.	RMC1/16 472JATP RMC1/16 103JATP RMC1/16 225JATP	10K	1/16W	
R 5011 J24185225 CHIP RES.	RMC1/16 225JATP	2.2M	1/16W	
R 5012 J24185561 CHIP RES.	RMC1/16 561JATP	560	1/16W	
R 5014 J24185684 CHIP RES.	RMC1/16 684JATP		1/16W	
R 5017 J24185104 CHIP RES.	RMC1/16 104JATP		1/16W	
R 5018 J24185472 CHIP RES.	RMC1/16 472JATP	4.7K	1/16W	
R 5019 J24185333 CHIP RES.	RMC1/16 333JATP RMC1/16 562JATP RMC1/16 154JATP	33K 5.6K	1/16W 1/16W	
R 5020 J24185562 CHIP RES.	MMC1/10 002JAIF	150K	1/16W	
R 5021 J24185154 CHIP RES. R 5022 J24185824 CHIP RES.	RMC1/16 824JATP	820K	1/16W	
R 5022 J24185823 CHIP RES.	RMC1/16 823JATP	82K	1/16W	
R 5024 J24185225 CHIP RES.	RMC1/16 225JATP		1/16W	
R 5025 J24185472 CHIP RES.	RMC1/16 472JATP	4.7K	1/16W	
R 5026 J24185472 CHIP RES.	RMC1/16 472JATP	4.7K	1/16W	
R 5027 J24185472 CHIP RES.	RMC1/16 472JATP RMC1/16 822JATP	4. 7K	1/16W	
R 5028 J24185822 CHIP RES.	RMC1/16 822JATP	8. 2K	1/16W	
R 5029 J24185472 CHIP RES.	RMC1/16 472JATP RMC1/16 103JATP		1/16W 1/16W	
R 5030 J24185103 CHIP RES. R 5031 J24185102 CHIP RES.	RMC1/16 103JATP			
R 5031 J24185102 CHIP RES. R 5032 J24185823 CHIP RES.	RMC1/16 823JATP			
R 5032 J24185104 CHIP RES.	RMC1/16 104JATP	100K		
R 5034 J24185104 CHIP RES.	RMC1/16 104JATP	100K	1/16W	
R 5035 J24185104 CHIP RES.	RMC1/16 104JATP	100K	1/16W	
R 5036 J24185104 CHIP RES.	RMC1/16 104JATP			
R 5037 J24185102 CHIP RES.	RMC1/16 102JATP	1K	1/16W 1/16W	
R 5038 J24185394 CHIP RES.	RMC1/16 394JATP RMC1/16 684JATP		1/16W	
R 5039 J24185684 CHIP RES. R 5040 J24185274 CHIP RES.	RMC1/16 0043ATP		1/16W	
R 5040 J24185274 CHIP RES. R 5041 J24185823 CHIP RES.	RMC1/16 823JATP		1/16W	
R 5042 J24185472 CHIP RES.	RMC1/16 472JATP		1/16W	
R 5043 J24185333 CHIP RES.	RMC1/16 333JATP	33K	1/16W	
R 5044 J24185562 CHIP RES.	RMC1/16 562JATP		1/16W	
R 5045 J24185472 CHIP RES.	RMC1/16 472JATP		1/16W	
R 5046 J24185472 CHIP RES.	RMC1/16 472JATP		1/16W	
R 5047 J24185223 CHIP RES.			1/16W 1/16W	
R 5048 J24185225 CHIP RES. R 5049 J24185223 CHIP RES.		2. Zri 22K	1/16W	
R 5049 J24185223 CHIP RES. R 5050 J24185472 CHIP RES.		4.7K	1/16W	
R 5050 J24185333 CHIP RES.			1/16W	
R 5052 J24185225 CHIP RES.	RMC1/16 225JATP	2.2M	1/16W	
R 5053 J24185473 CHIP RES.	RMC1/16 473JATP	47K	1/16W	
R 5054 J24185000 CHIP RES.			1/16W	
R 5055 J24185105 CHIP RES.			1/16W	
R 5056 J24185103 CHIP RES.			1/16W 1/16W	
R 5057 J24185225 CHIP RES. R 5058 J24185472 CHIP RES.			1/16W	
R 5058 J24185472 CHIP RES. R 5059 J24185000 CHIP RES.			1/16W	
R 5060 J24185474 CHIP RES.			1/16W	
R 5061 J24185000 CHIP RES.			1/16W	

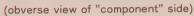
#### Interface Unit Parts List

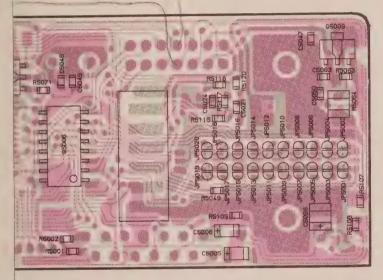
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R 5062	J24185224	CHIP RES.	RMC1/16 224JATP RMC1/16 472JATP RMC1/4 471JATP RMC1/16 103JATP RMC1/16 225JATP RMC1/16 104JATP RMC1/16 472JATP RMC1/16 105JATP	220K	1/16W	
R 5063	J24185472	CHIP RES.	RMCI/ID 47ZJATP	4.7K	1/16W	
R 5064	JZ4Z45471	CHIP RES.	RMCI/4 47IJATP	470	1/4W	
R 5065	J24185103	CHIP RES.	KMCI/Ib IUSJATP	10K	1/16W	
R 5066	JZ4185ZZ5	CHIP RES.	RMC1/10 ZZ5JAIP	2. ZM	1/16W	
R 5067	J241851U4	CHIP RES.	RMCI/Ib IU4JATP	100K	1/16W	
R 5068	J24185472	CHIP RES.	RMC1/16 47ZJATP	4.7K	1/16W	
					-,	
R 5071	J24185331	OILLD DOO	DUG1 /10 000 TIMD	0.017	4 /4 011	
R 5074	J24185223	CHIP RES.	RMC1/16 223JATP	22K	1/16W	
R 5075	JZ41851U4	CHIP RES.	RMCI/Ib IU4JATP	100K	1/16W	
R 5076	J241851U4	CHIP RES.	RMCI/16 1U4JATP	100K	1/16W	
R 5078	J24185472	CHIP RES.	RMCI/Ib 47ZJATP	4.7K	1/16W	
R 5079	JZ4Z45471	CHIP RES.	RMCI/4 4/IJATP	470	1/4W	
R 5080	JZ41851U4	CHIP RES.	MMCI/ID IU4JATP	100K	1/16W	
R 5081	JZ41851U4	CHIP RES.	RMC1/16 223JATP RMC1/16 104JATP RMC1/16 104JATP RMC1/16 472JATP RMC1/16 104JATP RMC1/16 104JATP RMC1/16 000JATP RMC1/16 000JATP RMC1/16 000JATP	100K	1/16W	
R 5086	J24185000	CHIP RES.	DMC1/16 OUUJATP	0	1/16W	
R 5087	J24185000	CHIP KES.	RMCI/ID UUUJATP	U	1/16W	
R 5088	J24185000	CHIP KES.	RMCI/ID UUUJAIP	U	1/16W	
10 0000	024100000	OHII IUDO.	MICI/ IO OCCONII	U	1/1011	
R 5090	J24185000	CHIP RES.	RMC1/16 000JATP	U	1/16W	
R 5091	J24185000	CHIP KES.	RMC1/16 000JATP	0	1/16W	
R 5092	J24185000	CHIP RES. CHIP RES. CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 5093	J24185000	CHIP KES.	RMC1/16 000JATP	0 0 0 0 0 0 0 0 0	1/16W	
R 5094	J24185000	CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 5095	J24185000	CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 5096 R 5097	J24185000	CHIP RES. CHIP RES.	RMC1/16 000JATP RMC1/16 000JATP	0	1/16W	
	J24185000			0	1/16W	
R 5098 R 5099	J24185000	CHIP RES. CHIP RES.	RMC1/16 000JATP	0	1/16W	
	J24185000	CHIR RES.	RMC1/16 000JATP	0	1/16W	
R 5100 R 5101	J24185000 J24185000	CHIP RES.	RMC1/16 000JATP RMC1/16 000JATP	0	1/16W	
				_	1/16W	
R 5102	J24185000	CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 5103 R 5104	J24185000	CHIP RES. CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 5104	J24185000	CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 5105	J24185000		RMC1/16 000JATP	0 10V	1/16W	
R 5107	J24185103	CHIP RES.	RMC1/16 103JATP RMC1/16 103JATP	10K	1/16W	
R 5108	J24185103	CHIP RES.	•	10K	1/16W	
R 51109	J24185103 J24185682	CHIP RES.	RMC1/16 103JATP	10K	1/16W	
R 5111	J24185222	CHIP RES.	RMC1/16 682JATP	6.8K	1/16W	
R 5111	J24185222 J24185333	CHIP RES.	RMC1/16 222JATP	2. 2K	1/16W	
R 5116	J24185222	CHIP RES.	RMC1/16 333JATP	33K	1/16W	
R 5117			RMC1/16 222JATP	2. 2K	1/16W	
	J24185102	CHIP RES.	RMC1/16 102JATP	1K	1/16W	
R 5118	J24185103	CHIP RES.	RMC1/16 103JATP	10K	1/16W	
R 5119 R 5120	J24185222	CHIP RES.	RMC1/16 222JATP	2. 2K	1/16W	
R 5120	J24185102 J24185471	CHIP RES.	RMC1/16 102JATP RMC1/16 471JATP	1K 470	1/16W	
10 0121	024100411	OHII HED.	10101/10 4/1JAIF	410	1/16W	

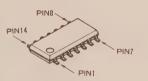




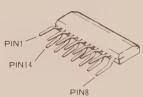
M37450M2 (Q5005) μPD4028BG (Q5006)





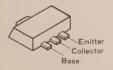


NJM2902M (Q5015, Q5016) μPD4052BG (Q5007)

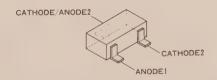


M51523AL (Q5002)

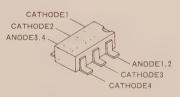
(obverse view of "chip-only" side)



2SA1213Y(NO) (Q5009, Q5019)



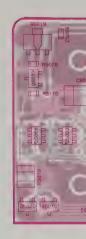
1SS226 (C3) (Q5006,Q5007)



IMP11(P11) (D5001, D5002, D5003, D5004, D5005)

michael Chil Late Elet						
REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG.	VALUE	WV TOL.	VERS.
R 5062	J24185224	CHIP RES.	RMC1/16 224.JATP	220K	1/16W	
R 5063		CHIP RES.	RMC1/16 472.IATP	4.7K	1/16W	
R 5064	J24245471	CHIP RES.	RMC1/16 224JATP RMC1/16 472JATP RMC1/4 471JATP RMC1/16 103JATP	470	1/4W	
R 5065	J24185103	CHIP RES.	RMC1/16 103.JATP	10K	1/16W	
R 5066		CHIP RES.	RMC1/16 225JATP	2. 2M	1/16W	
R 5067	J24185104	CHIP RES.	RMC1/16 104JATP		1/16W	
R 5068	J24185472	CHIP RES.	RMC1/16 472JATP		1/16W	
R 5070		CHIP RES.	DMO1 /10 105 TAME	1 M	1 /1053	
R 5071		CHIP RES.	RMC1/16 331.JATP	330	1/16W	
R 5074		CHIP RES.	RMC1/16 223.JATP	2.2K	1/16W	
R 5075	J24185104	CHIP RES.	RMC1/16 104.IATP	100K	1/16W	
R 5076	J24185104	CHIP RES.	RMC1/16 104.IATP	100K	1/16W	
R 5078	J24185472	CHIP RES.	RMC1/16 105JATP RMC1/16 331JATP RMC1/16 223JATP RMC1/16 104JATP RMC1/16 472JATP RMC1/14 471JATP	4 7K	1/16W	
R 5079		CHIP RES.	RMC1/4 471JATP	470	1/4W	
R 5080		CHIP RES.	RMC1/16 104JATP		1/16W	
R 5081		CHIP RES.	RMC1/16 104.TATP	1 N N K	1/16W	
R 5086		CHIP RES.	RMC1/16 1040ATT RMC1/16 000JATP RMC1/16 000JATP RMC1/16 000JATP RMC1/16 000JATP	0	1/16W	
R 5087		CHIP RES.	RMC1/16 0000ATT	0	1/16W	
R 5088		CHIP RES.	RMC1/16 0000ATT	0	1/16W	
R 5089		CHIP RES.	RMC1/16 0000ATT	0	1/16W	
R 5090		CHIP RES.	RMC1/16 0000ATT	0	1/16W	
R 5091		CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 5092		CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 5093	J24185000	CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 5094		CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 5095		CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 5096		CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 5097		CHIP RES.	DMC1/10 000JATE	0		
R 5098		CHIP RES.	DMC1/10 000JATE	0	1/16W	
R 5099		CHIP RES.	RMC1/16 000JATP RMC1/16 000JATP RMC1/16 000JATP	0	1/16W	
R 5100			DMC1/10 UUUJAIP	0	1/16W	
R 5100	J24185000 J24185000	CHIP RES.	RMC1/16 000JATP	0	1/16W	
		CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 5102	J24185000	CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 5103		CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 5104		CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 5105		CHIP RES.	RMC1/16 000JATP	0	1/16W	
R 5107		CHIP RES.	RMC1/16 103JATP	10K	1/16W	
R 5108	J24185103		RMC1/16 103JATP	10K	1/16W	
R 5109		CHIP RES.	RMC1/16 103JATP	10K	1/16W	
R 5110		CHIP RES.	RMC1/16 682JATP	6.8K	1/16W	
R 5111			RMC1/16 222JATP	2. 2K	1/16W	
R 5115		CHIP RES.	RMC1/16 333JATP	33K	1/16W	
R 5116		CHIP RES.	RMC1/16 222JATP	2. 2K	1/16W	
R 5117	J24185102	CHIP RES.	RMC1/16 102JATP	1K	1/16W	
R 5118	J24185103	CHIP RES.	RMC1/16 103JATP	10K	1/16W	
R 5119		CHIP RES.	RMC1/16 222JATP	2. 2K	1/16W	
R 5120		CHIP RES.	RMC1/16 102JATP	1K	1/16W	
R 5121	J24185471	CHIP RES.	RMC1/16 471JATP	470	1/16W	

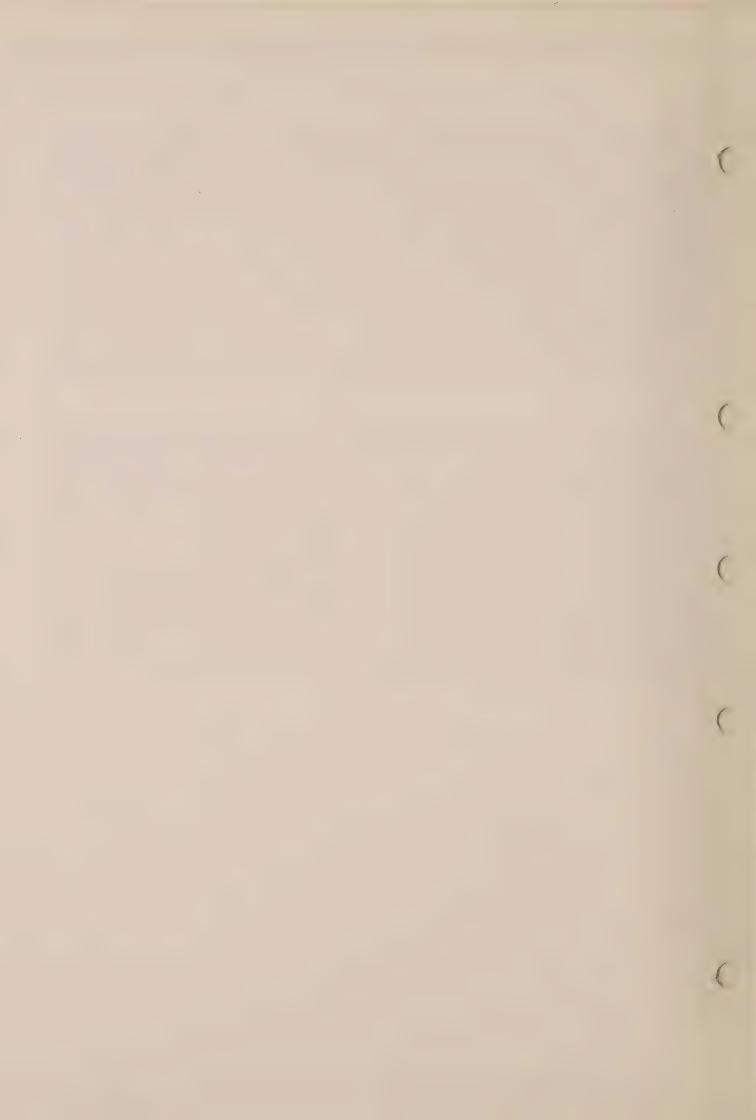
#### INTERFACE U

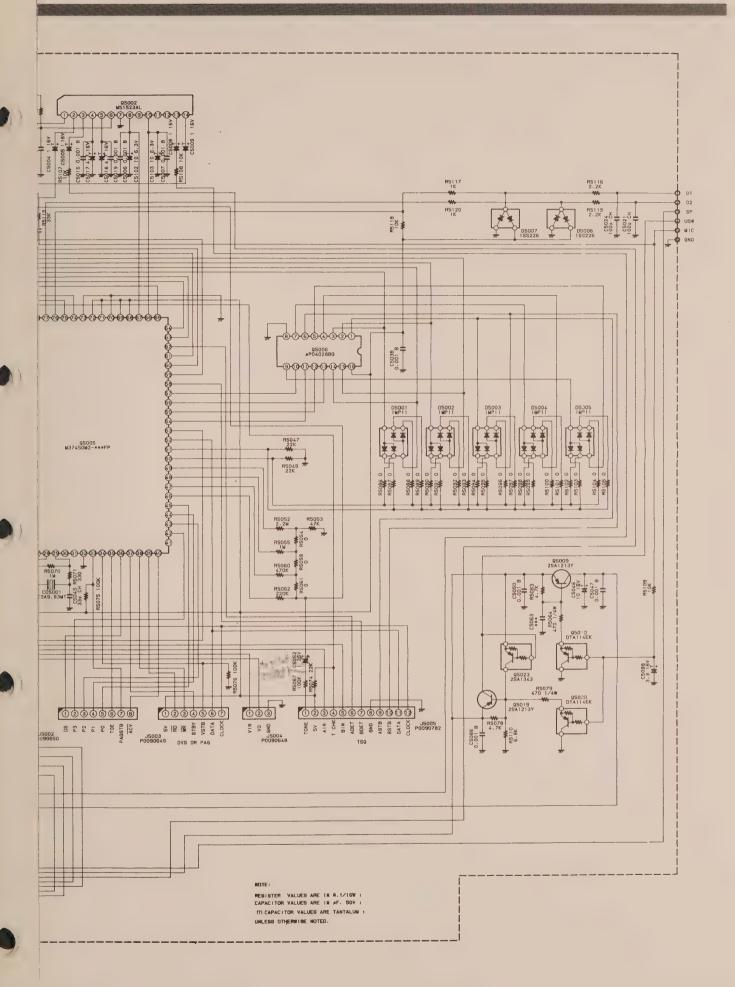




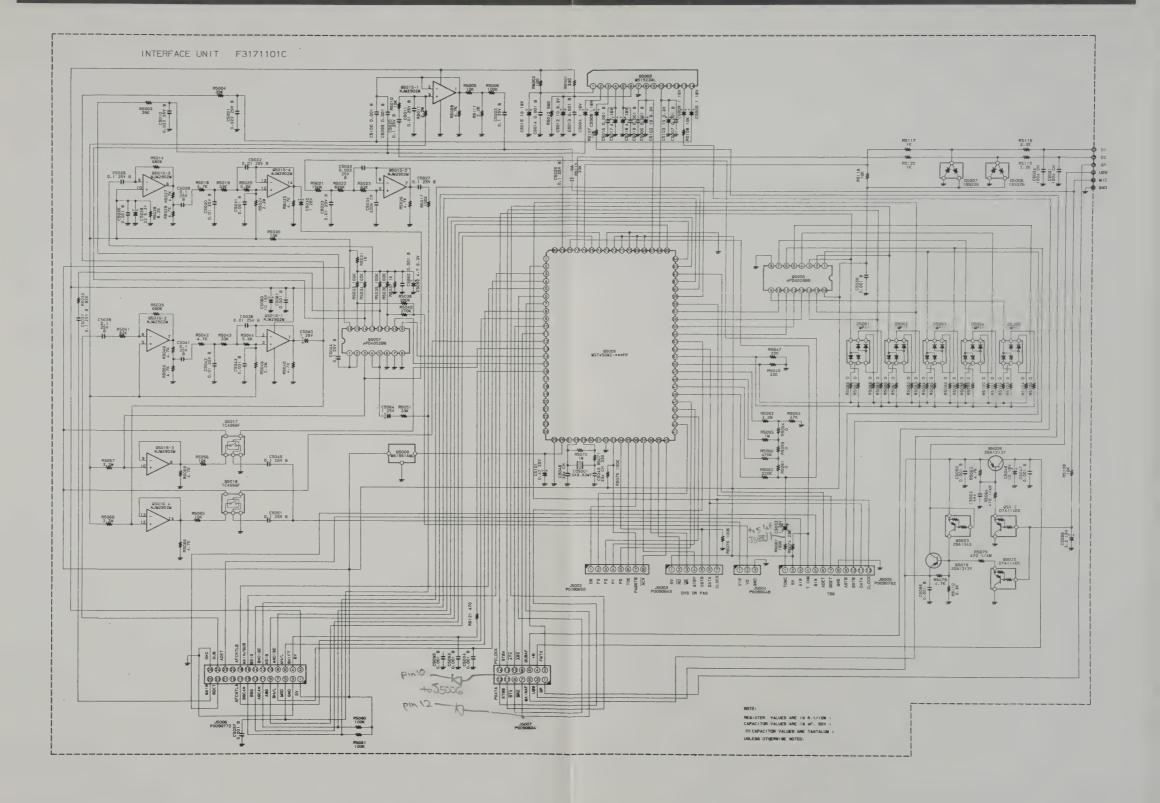


TC4S66F( (Q5017,Q

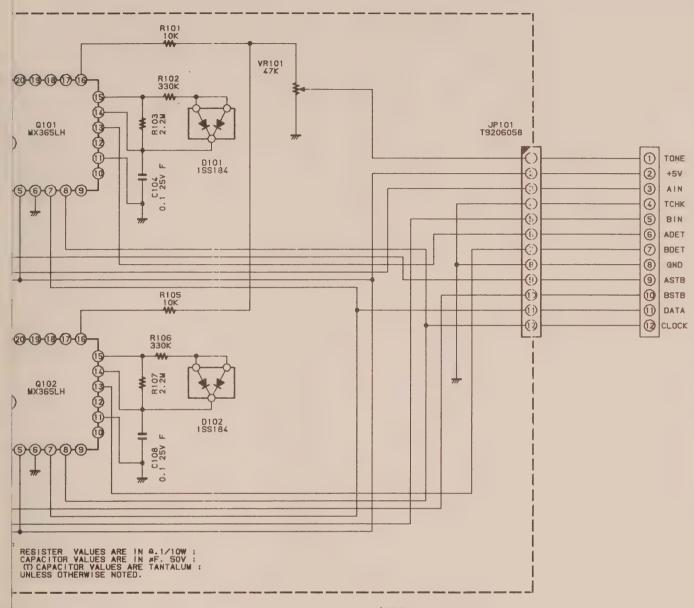


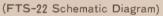


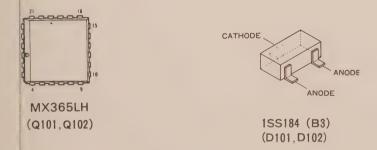


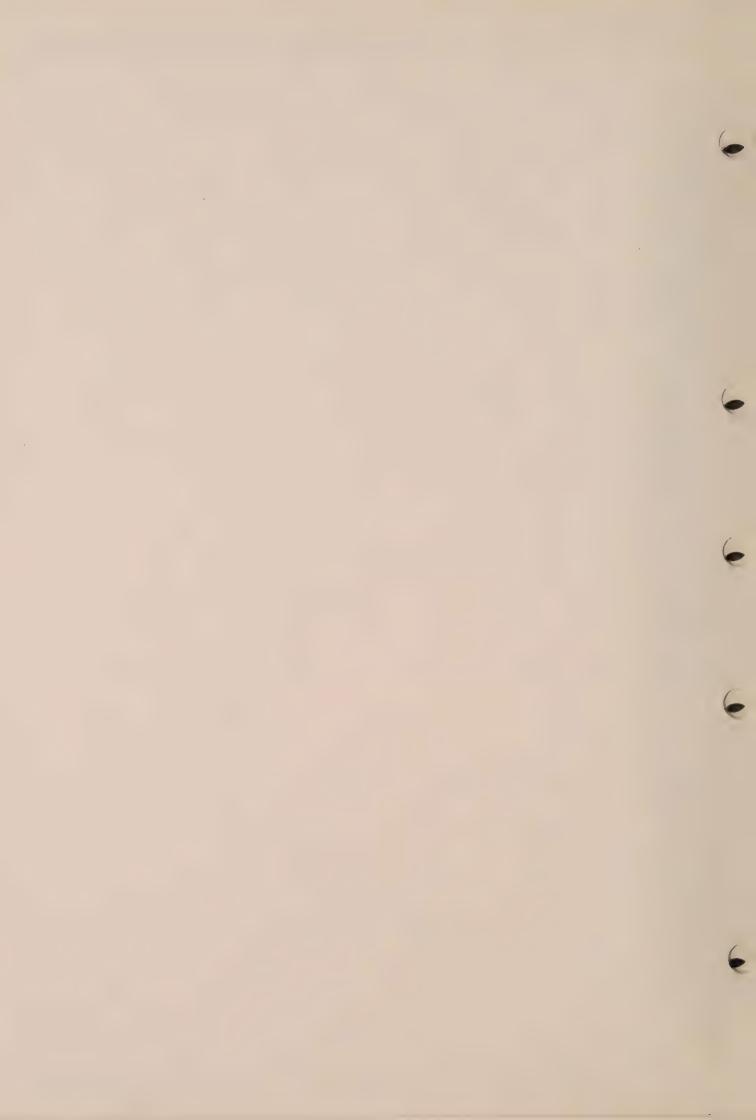




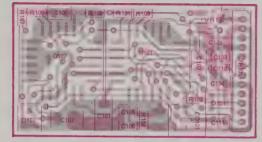




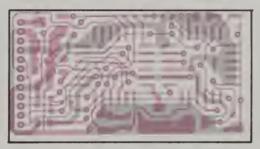




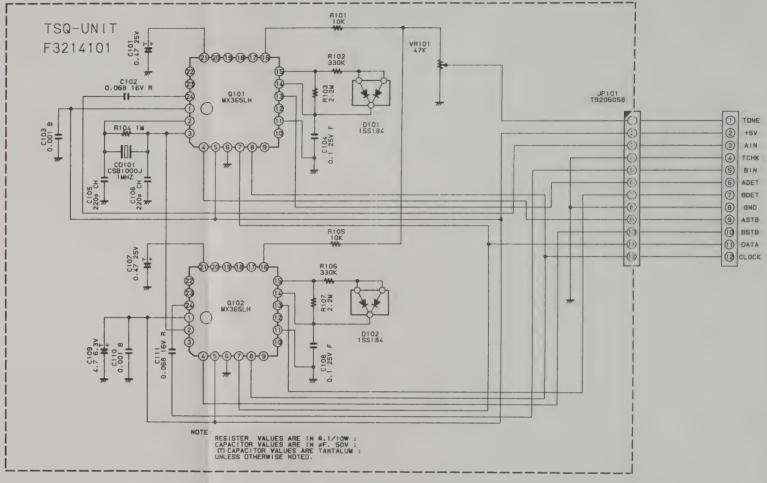
	YAESU P/N  F3214101	DESCRIPTION P.C.B.	MFGR'S DESIG	VALUE	WV 	TOL.	VERS.
C 0101 C 0102 C 0103 C 0104 C 0105 C 0106 C 0107 C 0108 C 0109 C 0110 C 0111	K78140012 K22120805 K22174809 K22141005 K22174243 K22174243 K78140012 K22141005 K78080002 K22174809 K22120805	TANTALUM CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. CHIP CAP. TANTALUM CHIP CAP. CHIP CAP.	F951E474MRAAF1Q2 GRM40R683M16PT GRM39B102M50PT GRM40F104Z25PT GRM39CH221J50PT GRM39CH221J50PT F951E474MRAAF1Q2 GRM40F104Z25PT F950J475MSAAF1Q2 GRM39B102M50PT GRM40R683M16PT	0.47uF 0.068uF 0.001uF 0.1uF 220pF 220pF 0.47uF 0.1uF 4.7uF 0.001uF 0.068uF	25V 16V 50V 25V 50V 25V 25V 6.3V 50V 16V	R B F CH CH	
	H7900550		CSB1000J221T				
	G2070009 G2070009	DIODE	1SS184 TE85R 1SS184 TE85R				
JP0101	T9206058	WIRE-ASSY					
Q 0102	G1090897	10	MX365LH MX365LH				
R 0101 R 0102 R 0103 R 0104 R 0105 R 0106 R 0107	J24185103 J24185334 J24185225 J24185105 J24185103 J24185334 J24185225	CHIP RES.	RMC1/16 103JATP RMC1/16 334JATP RMC1/16 225JATP RMC1/16 105JATP RMC1/16 103JATP RMC1/16 334JATP RMC1/16 225JATP	10K 330K 2.2M 1M 10K 330K 2.2M	1/16W 1/16W 1/16W 1/16W 1/16W 1/16W		
VR0101	J51778473	POT.	RHO3AYAS4X 47K	47K			



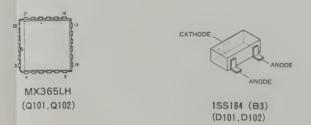
(obverse view of "component" side)



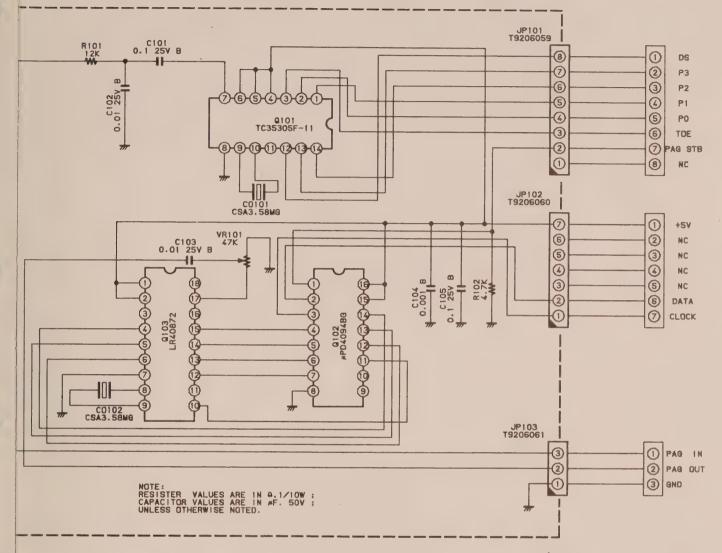
(obverse view of "solder" side)



(FTS-22 Schematic Diagram)

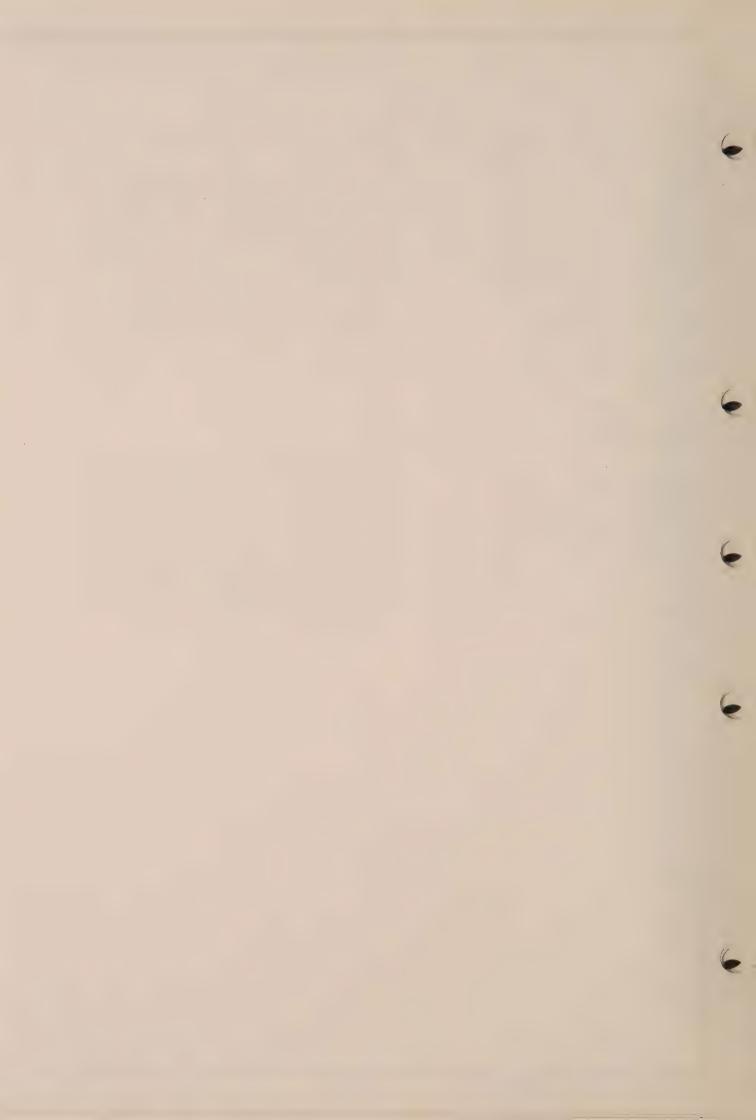




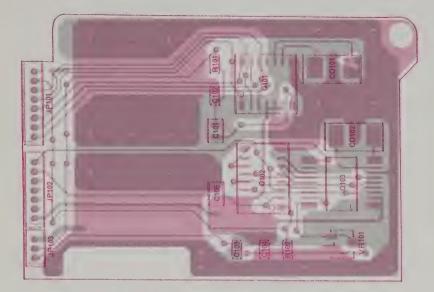


(FRC-4 Schematic Diagram)

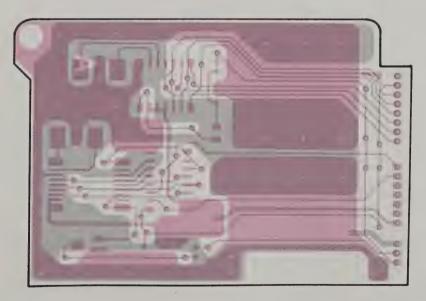




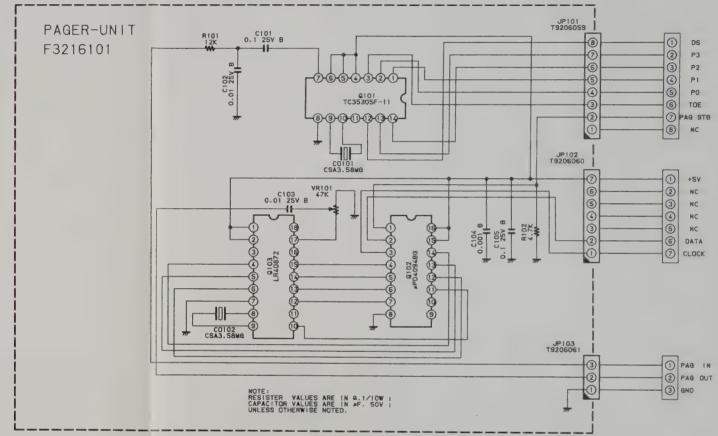
REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG	VALUE	WV	TOL.	VERS.
	F3216101	P.C.B.					
C 0103	K22140811 K22144803 K22144803 K22174821 K22140811		GRM39B103K25PT GRM39B103K25PT GRM39B102K50PT	0.01uF 0.001uF	25V 25V 50V	B B B B	
C00101 C00102	H7900510 H7900510	CERAMIC OSC CERAMIC OSC	CSA3.58MG CSA3.58MG				
	T9206059 T9206060 T9206061	WIRE-ASSY WIRE-ASSY WIRE-ASSY					
		1C 1C 1C	TC35305F-11 TP2 UPD4094BG LR40872				
R 0101 R 0102	J24185123 J24185472	CHIP RES.	RMC1/16 123JATP RMC1/16 472JATP				
VR0101	J51778473	POT.	RH03AYAS4X	47K			



(obverse view of "component" side)

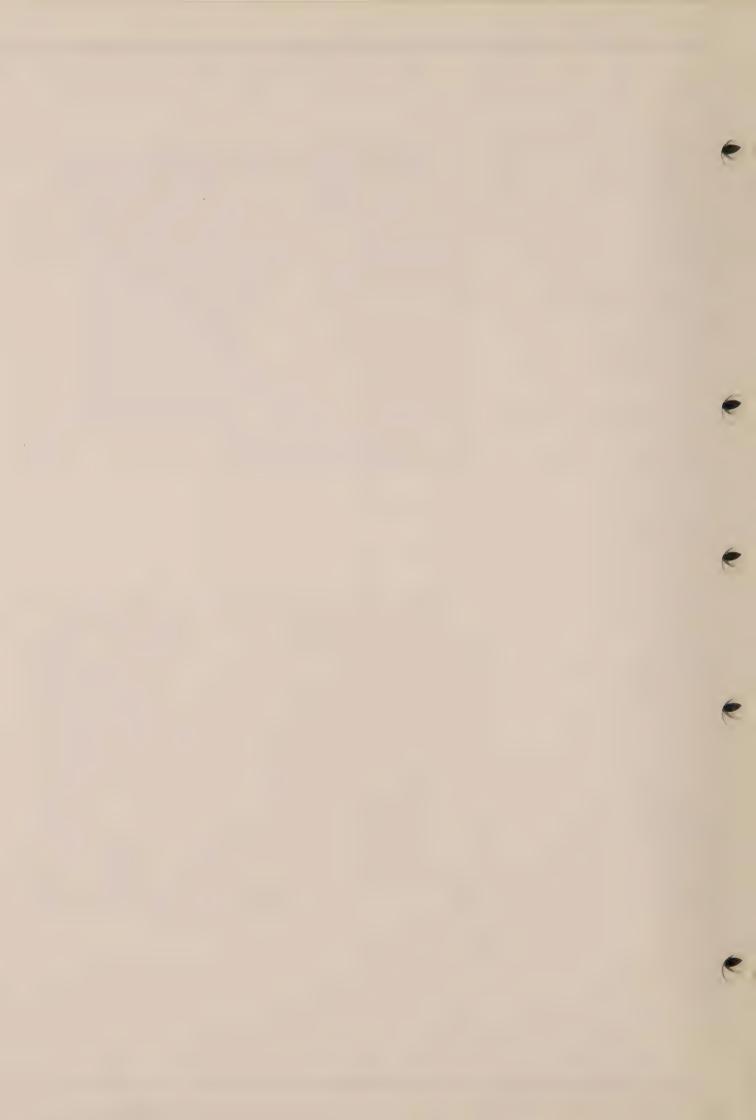


(obverse view of "solder" side)



(FRC-4 Schematic Diagram)



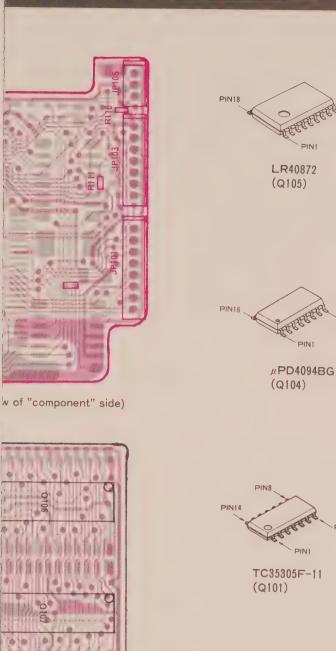


### DVS-3 Digital Voice Option Parts List

I								
	REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG	VALUE	WV	TOL.	VERS.
		F3215101	P. C. B.					
	BT0101	Q9000268	LITHIUM BATTERY	CR2032-HM4				
	C 0101 C 0102 C 0103 C 0104 C 0105 C 0106 C 0107 C 0108 C 0109 C 0110 C 0111 C 0112 C 0113 C 0114	K22174235 K22174235 K22140811 K22140811 K22140811 K22140811 K40089023 K22140811 K22174821 K22174821 K22170817 K40089023 K22140811 K22140811	CHIP CAP. AL. ELECTRO. CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. CHIP CAP. AL. ELECTRO. CAP. CHIP CAP.	GRM39CH101J50PT GRM39CH101J50PT GRM40B104M25PT GRM40B104M25PT GRM40B103M50PT GRM40B104M25PT RC2-6V470MS (4X7) GRM40B104M25PT GRM40B223K25PT GRM40B223K25PT GRM39B102K50PT GRM40B103M50PT RC2-6V470MS (4X7) GRM40B104M25PT GRM40B104M25PT GRM40B104M25PT	47uF 0.1uF 0.022uF 0.001uF 0.01uF 47uF 0.1uF	50V 50V 25V 25V 50V 25V 6.3V 25V 50V 6.3V 25V 25V	CH CH B B B B B B B	
	C00101 C00102 C00103	H7900660 H7900510 H7900510	CERAMIC OSC CERAMIC OSC CERAMIC OSC	CSB512J CSA3.58MG CSA3.58MG				
	D 0101 D 0102	G2090118 G2090118	DIODE DIODE	1SS / 1SS97				
	JP0101 JP0103 JP0105	T9206059 T9206060 T9206061	WIRE-ASSY WIRE-ASSY WIRE-ASSY					
	Q 0101 Q 0102 Q 0103 Q 0104 Q 0105 Q 0106 Q 0107 Q 0108 Q 0109 Q 0110	G1091177 G1090841 G1090863 G1090696 G1090731 G1090863 G1090863 G1090863 G3070037 G3070037	IC IC IC IC IC IC IC IC TC TRANSISTOR TRANSISTOR	TC35305F-11 TP2 TC8830F-BS UPD43256AGU-12LL UPD4094BG LR40872 UPD43256AGU-12LL UPD43256AGU-12LL UPD43256AGU-12LL RN1303 RN1303				
	R 0101 R 0102 R 0103 R 0104 R 0105 R 0106 R 0107 R 0108 R 0109 R 0110 R 0111 R 0112 R 0113 R 0114 R 0115	J24185224 J24185472 J24185123 J24185103 J24185103 J24185104 J24185104 J24185472 J24185472 J24185222 J24185222 J24185222 J24185222 J24185222 J24185222 J24185222 J24185222	CHIP RES.	RMC1/16 224JATP RMC1/16 472JATP RMC1/16 123JATP RMC1/16 473JATP RMC1/16 103JATP RMC1/16 104JATP RMC1/16 104JATP RMC1/16 472JATP RMC1/16 472JATP RMC1/16 222JATP RMC1/16 223JATP RMC1/16 222JATP RMC1/16 222JATP RMC1/16 222JATP RMC1/16 222JATP RMC1/16 222JATP RMC1/16 222JATP RMC1/16 333 33K	220K 4.7K 12K 47K 10K 10K 100K 100K 4.7K 4.7K 2.2K 2.2K 2.2K 33K	1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W		

### DVS-3 Digital Voice Option Parts List

3 × × ×					<u> </u>		
REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG	VALUE	WV	TOL.	VERS.
S 0101 S 0102	N6090069 N6090069	SLIDE SWITCH SLIDE SWITCH	SSSS21 SSSS21				
VR0101	J51778473	POT.	RHO3AYAS4X 47K	47K			

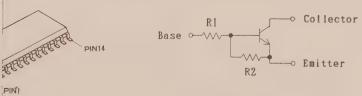


COLLECTOR

COLLECTOR

BASE

RN1303 (XC)
(Q109,Q110)

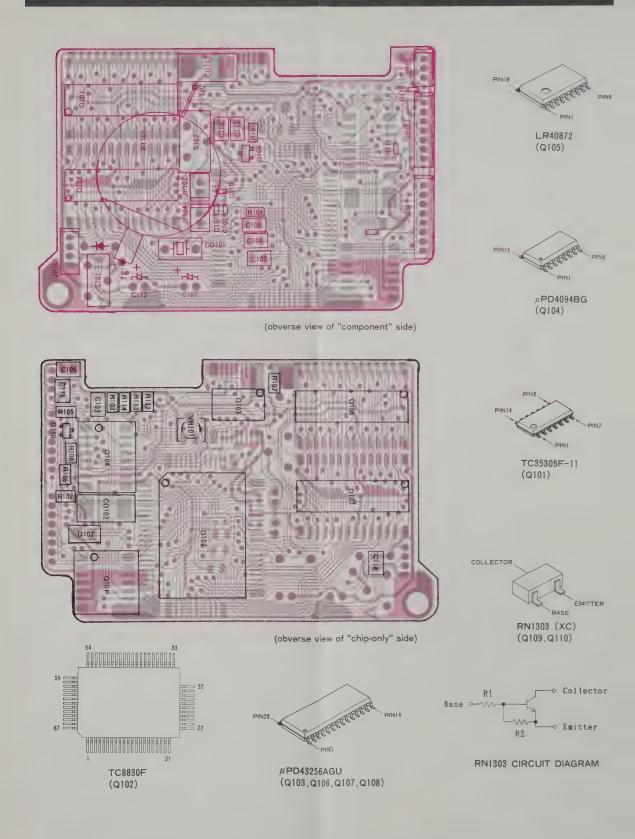


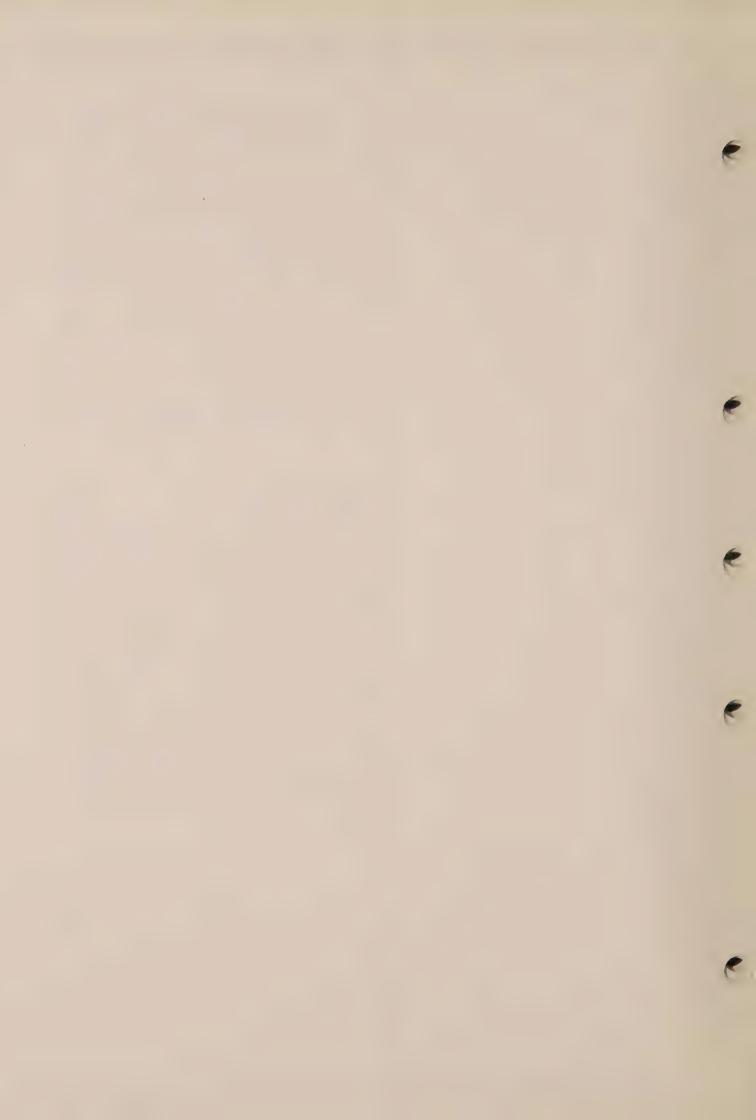
RN1303 CIRCUIT DIAGRAM

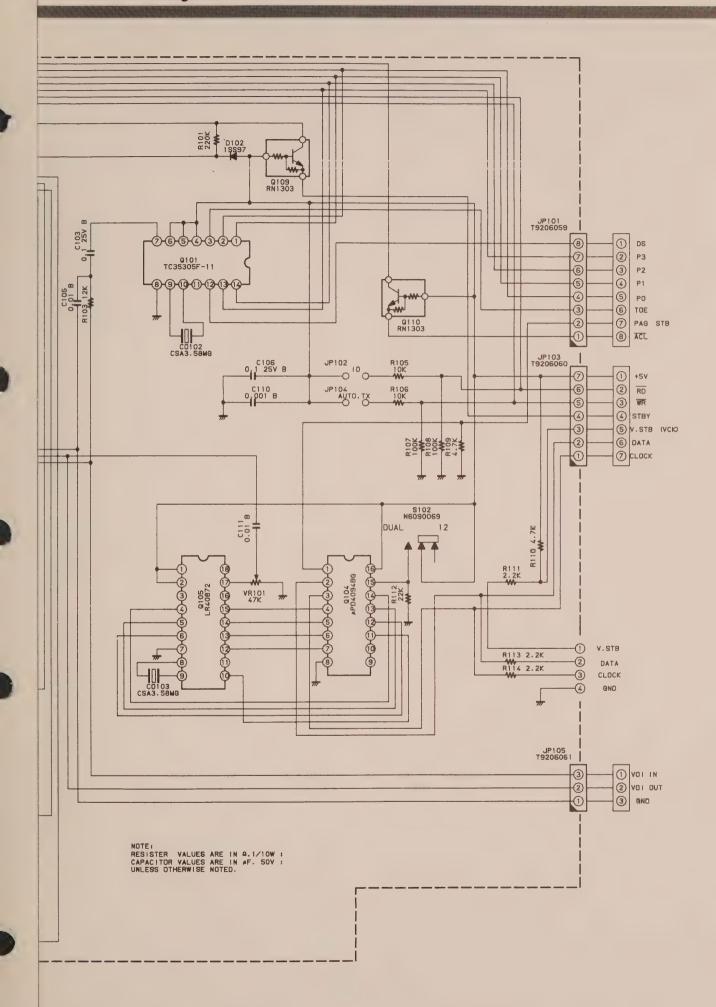
06, Q107, Q108)

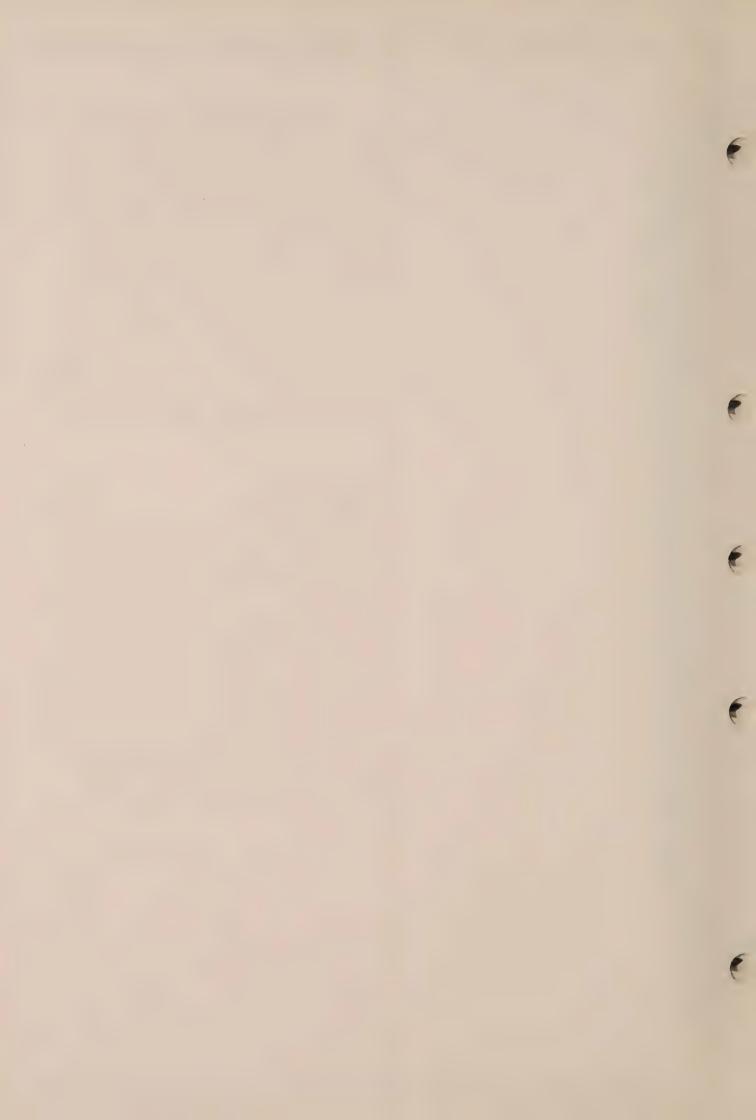
### DVS-3 Digital Voice Option Parts List

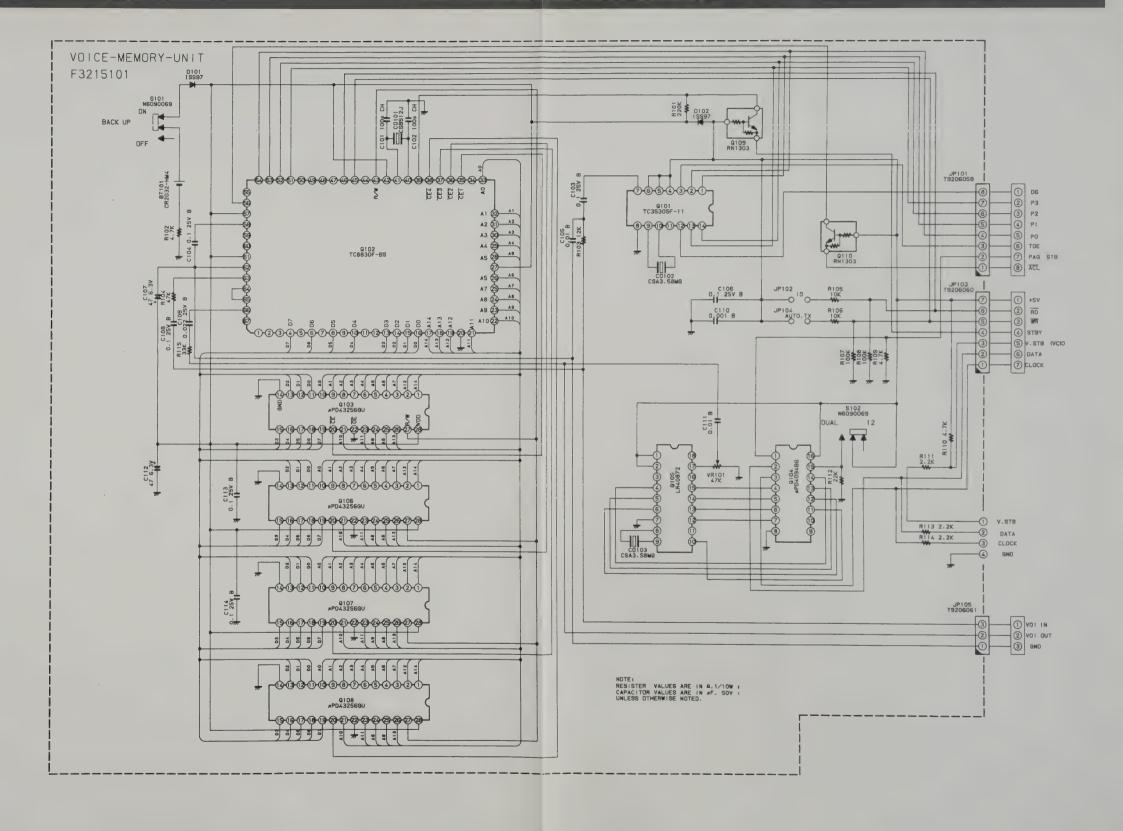
REF.	YAESU P/N	DESCRIPTION	MFGR'S DESIG	VALUE	WV	TOL.	VERS.
S 0101 S 0102	N6090069 N6090069	SLIDE SWITCH SLIDE SWITCH	SSSS21 SSSS21				
VR0101	J51778473	POT.	RHO3AYAS4X 47K	47K			







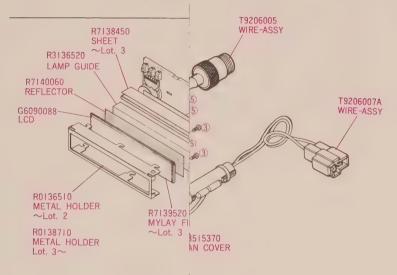


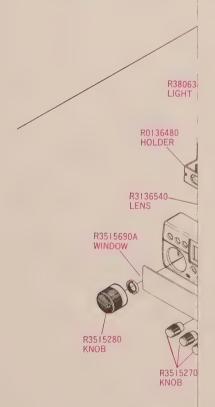




## **Exploded View**

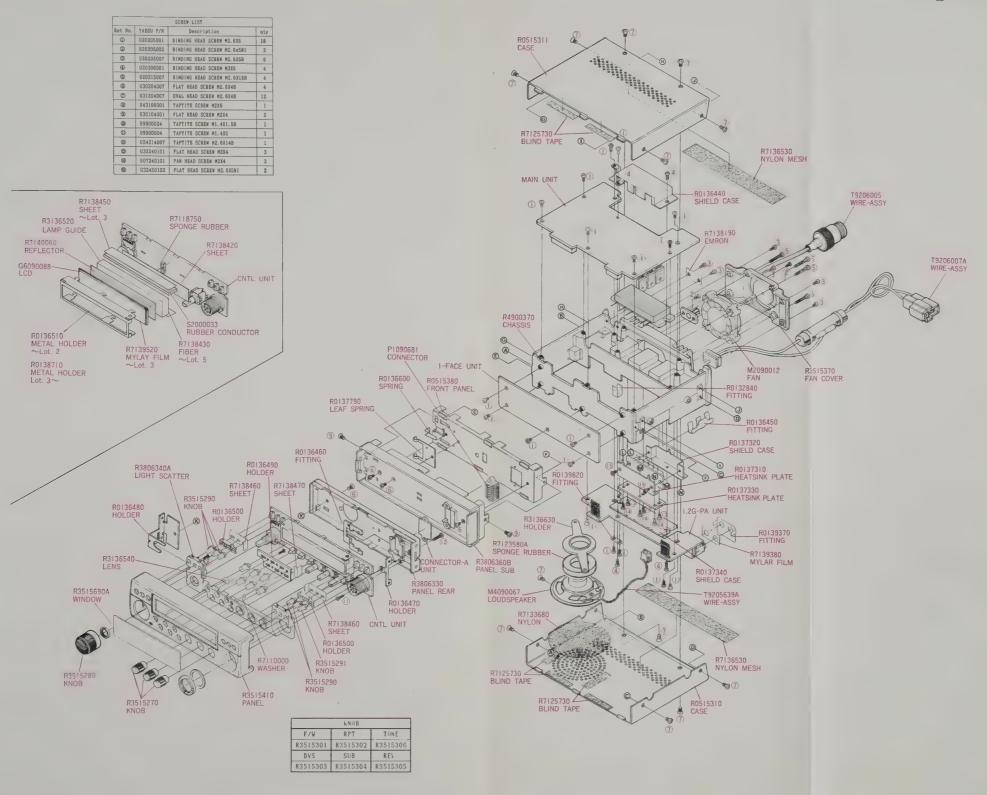
Ret No.	YAESU P
1	U202050
2	U202050
3	U202050
4	U203060
(5)	U202150
6	U302040
7	U312040
8	U431060
9	U301040
0	U990002
00	U990000
100	U242140
13	U322401
100	U072401
45	U324501





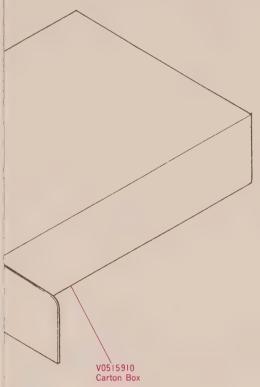


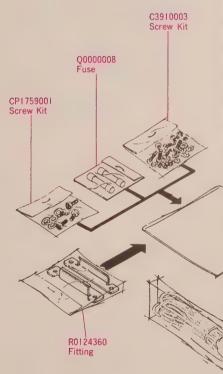
### **Exploded View**



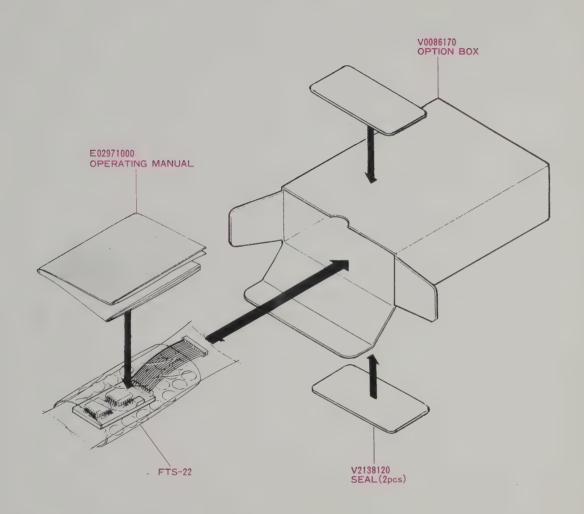


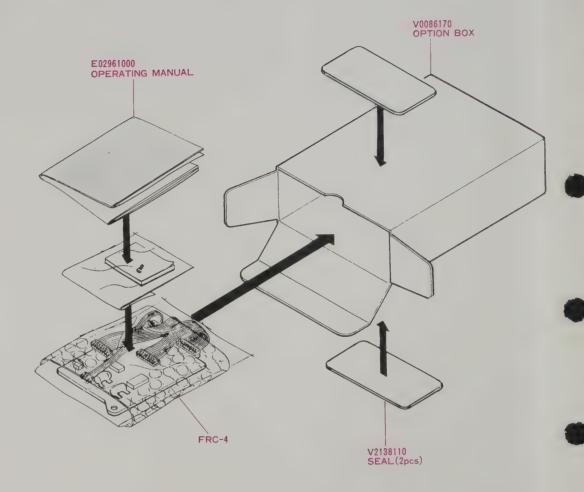
# **Packaging**



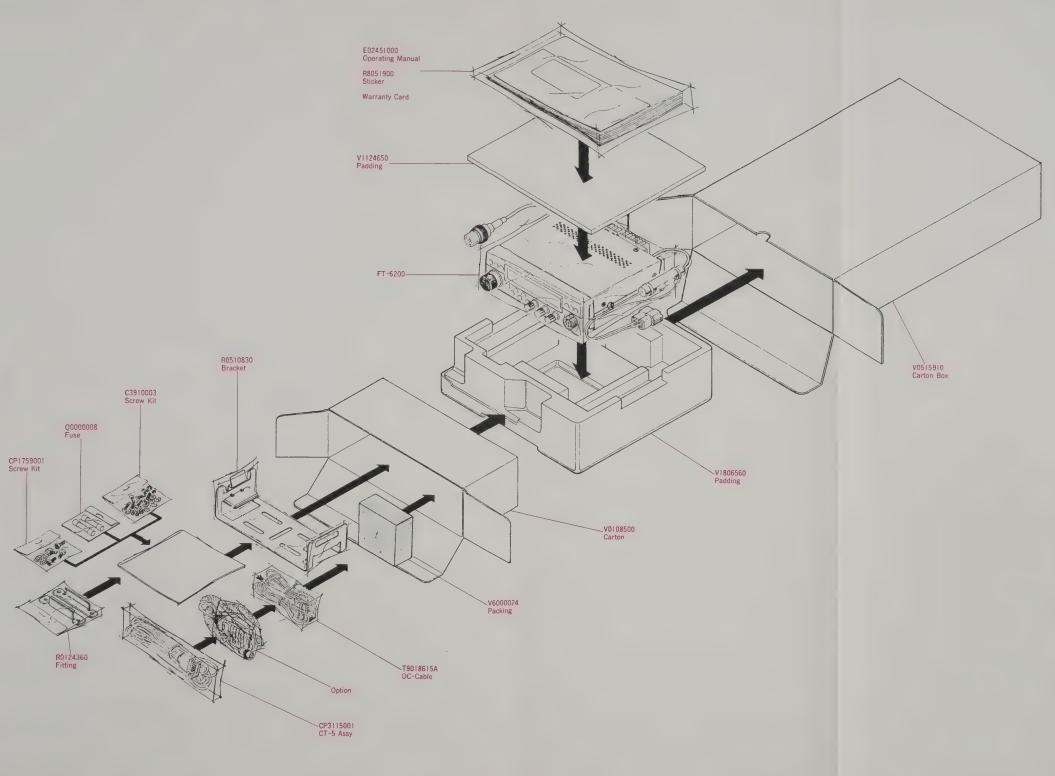


### Packaging: FTS-22 CTCSS & FRC-4 Pager Option

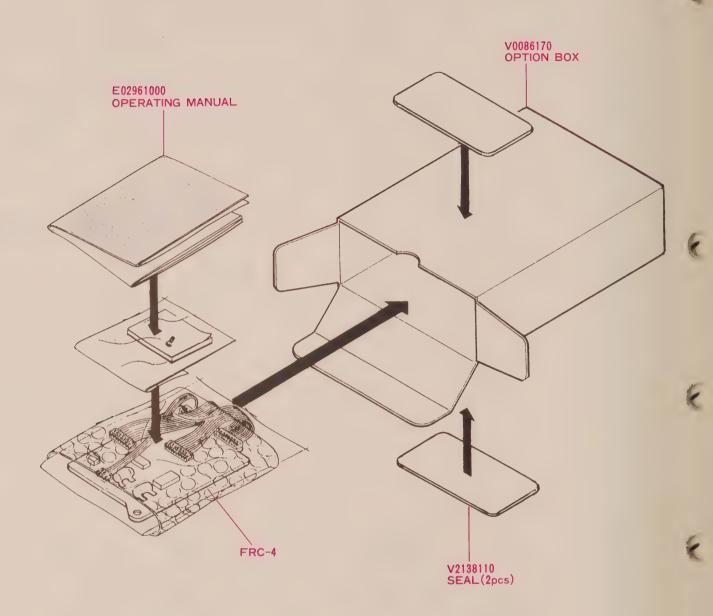




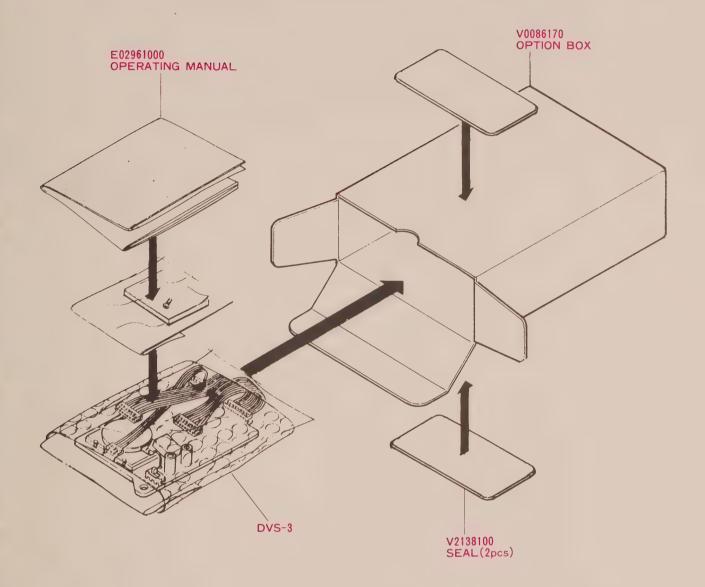
## **Packaging**



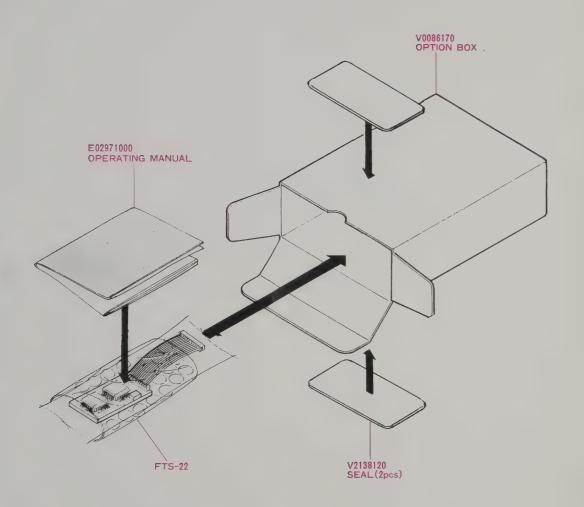
# ging: RC-4 Pager Option

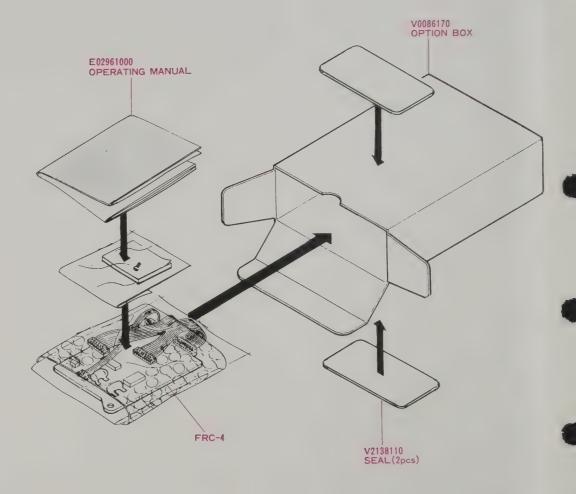


## Packaging: DVS-3 Digital Voice Option

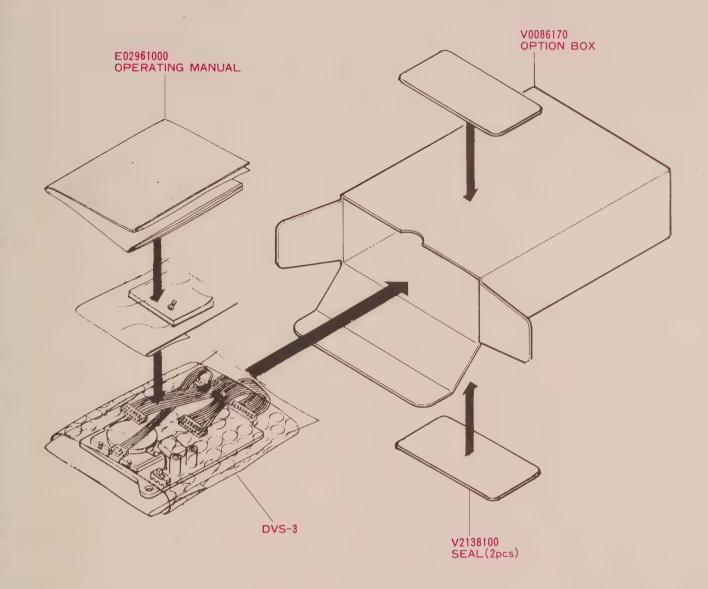


## Packaging: FTS-22 CTCSS & FRC-4 Pager Option





## Packaging: DVS-3 Digital Voice Option



# Notes





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#### A CCOPPESSO

25970 YELLOW
25971 BLACK
25972 LIGHT BLUE
25973 DARK BLUE
25974 LIGHT GRAY
25975 LIGHT GREEN
25976 DARK GREEN
25977 TANGERINE
25978 RED
25979 EXECUTIVE RED

GENUINE PRESSEGARE



ACGO INTERNATIONAL INC. CHICAGO, ILLINOIS 60619

